

MARINE CORPS AIR STATION

EL TORO, CALIFORNIA

Base Realignment and Closure (BRAC) Cleanup Plan

03 March 1995

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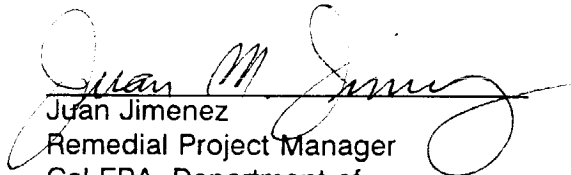
**MCAS EL TORO
EL TORO, CALIFORNIA**

**BASE REALIGNMENT AND CLOSURE
(BRAC) CLEANUP PLAN**

This BRAC Cleanup Plan provides current summary information on the status of and strategies for the cleanup of MCAS El Toro. We, the BRAC Cleanup Team, with consideration of community and stakeholder advice, have cooperatively developed this plan to provide for the safe, effective, timely and cost efficient environmental restoration and productive reuse of this DoD closing facility. This plan will be updated periodically to reflect new information regarding the environmental condition of the property, reuse priorities, and availability of funds.


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List of Acronyms

ACER	Aircraft Expeditionary Refueling
ACM	asbestos-containing materials
AC/S	Assistant Chief of Staff
AIRHAS	Airborne Hazardous Substances
AOC	area of concern
AQMP	Air Quality Management Plan
AR	Administrative Record
ARAR	Applicable or Relevant and Appropriate Requirement
AST	aboveground storage tank
BCP	BRAC Cleanup Plan
BCT	BRAC Cleanup Team
BEC	BRAC Environmental Coordinator
BFI	Browning Ferris Industries
bgs	below ground surface
BMP	Best Management Practice
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAA	Clean Air Act
Cal-EPA	California Environmental Protection Agency
CBCEC	California Base Closure Environmental Committee
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CLEAN	Comprehensive Long-term Environmental Action Navy
CNDDDB	California Natural Diversity Data Base
COE	U.S. Army Corps of Engineers
CTO	Contract Task Order
D&M	Dames and Moore
D & R ROD	Disposal and Reuse Record of Decision
DOD	Department of Defense
DOJ	Department of Justice
DON	Department of the Navy/United States Marine Corps
DRMO	Defense Reutilization Marketing Organization
DTSC	Department of Toxic Substances Control

List of Acronyms

EBS	Environmental Baseline Survey
EE/CA	Engineering Evaluation/Cost Analysis
EIS	Environmental Impact Statement
EO	Environmental Office
EOD	explosive ordnance disposal
EPA	U.S. Environmental Protection Agency
ETRPA	El Toro Reuse Planning Authority
FDS	Federal Disposal Services
FFA	Federal Facilities Agreement
FMD	Facilities Management Department
FMF	Fleet Marine Force
FOST	finding of suitability to transfer
FOSL	finding of suitability to lease
ft/day	feet per day
GIS	Geographical Information System
HUD	U.S. Department of Housing and Urban Development
HWSA	hazardous waste storage area
IAFS	Interim Action Feasibility Study
IDP	Irvine Desalter Project
IDW	investigation-derived waste
IRP	Installation Restoration Program
IRPM	Installation Restoration Project Manager
IRWD	Irvine Ranch Water District
ITEMS	International Technology Environmental Management System
Jacobs	Jacobs Engineering Group Inc.
JMM	James M. Montgomery Engineers
LBP	lead-based paint
LOC	location of concern
LUFT	leaking underground fuel tank
MCAS	Marine Corps Air Station
mg/L	milligrams per liter
MOU	memorandum of understanding
MWR	Morale, Welfare, and Recreation Office
NAVFACENGCOM	Naval Facilities Engineering Command

List of Acronyms

NAVRAMP	Navy Radon Assessment and Mitigation Program
NCP	National Contingency Plan
NEESA	Naval Energy and Environmental Support Agency
NFESC	Naval Facilities Engineering Services Center
NEPA	National Environmental Policy Act
NFRAP	no further response action planned
NPDES	National Pollution Discharge Elimination System
NPWC	Navy Public Works Center
NPL	National Priorities List
OCHCA	Orange County Health Care Agency
OCWD	Orange County Water District
OEA	Office of Economic Adjustment
OU	operable unit
OWS	oil/water separator
PBR	Permit by Rule
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
POI	point of interest
POL	petroleum, oils, and lubricants
POTW	publicly owned treatment works
ppm	parts per million
PR	Preliminary Review
PRP	Potentially Responsible Party
QA/QC	quality assurance/quality control
QAPP	Quality Assurance Project Plan
RA	remedial action
RAB	Remedial Advisory Board
RAC	remedial action contract
RACER/ENVEST	Remedial Action Cost Engineering and Requirements/Environmental Cost Engineering
RAP	Remedial Action Plan
RBC	risk-based criteria
RCRA	Resource Conservation and Recovery Act
RD	remedial design
RECLAIM	Regional Clean Air Initiatives Market
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study

List of Acronyms

ROD	Record of Decision
RWQCB	Regional Water Quality Control Board
SAIC	Science Applications International Corporation
SARA	Superfund Amendments and Reauthorization Act
SCAQMD	South Coast Air Quality Management District
SI	Site Inspection
SV	Sampling Visit
SVE	soil vapor extraction
SVOC	semivolatile organic compound
SWDIV	Southwest Division, Naval Facilities Engineering Command
SWMU	solid waste management unit
TAFDS	tactical airfield fuel dispensing systems
TAG	Technical Assistance Grant
TDS	total dissolved solids
TMP	Tank Management Plan
TPH	total petroleum hydrocarbons
TRC	Technical Review Committee
TSCA	Toxic Substances Control Act
USFWS	U.S. Fish and Wildlife Service
USMC	United States Marine Corps
USMCR	USMC Reserve
UST	underground storage tank
VOC	volatile organic compound
VSI	Visual Site Inspection
WW II	World War II

Executive Summary

The U.S. Department of the Navy (DON) is planning the closure and disposal of Marine Corps Air Station (MCAS) El Toro (or Station) by July 1999, in accordance with the Base Realignment and Closure (BRAC) Act of 1993. The DON has organized a BRAC Cleanup Team (BCT) to manage and coordinate closure activities and to prepare a BRAC Cleanup Plan (BCP). The BCP describes the status of, management and response strategies for, and action items related to, the environmental restoration and compliance programs at MCAS El Toro. These programs support base property disposal and reuse, considering the following regulatory mechanisms:

- o BRAC
- o National Environmental Policy Act (NEPA)
- o Resource Conservation and Recovery Act (RCRA)
- o Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), and the Community Environmental Response Facilitation Act (CERFA)

The BCP is a planning document, therefore, the information and assumptions presented may not necessarily have complete approval from the federal and state regulatory agencies. The BCP is a dynamic document that will be updated regularly to reflect the current status of remedial actions, and the changes in strategies or plans that affect the ultimate restoration and disposal of MCAS El Toro property. Comments from various sources, including major claimants, naval activities, and federal and state regulatory agencies, will be evaluated and

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considered for inclusion into updates of this BCP. This document represents information available as of February 1995.

Status of Disposal, Reuse, and Interim Lease Process

In March 1994, the County of Orange (County), along with the cities of Irvine and Lake Forest, formed the El Toro Reuse Planning Authority (ETRPA). In January 1995, however, the County withdrew from the ETRPA to pursue formation of a new reuse committee. Currently, the resolution of the new reuse committee is not finalized.

As part of base closure, the following four key documents will be prepared:

- o Community Reuse Plan
- o Specific Plan for Zoning
- o Federal Environmental Impact Statement

In the absence of a reuse plan for the Station, reuse parcels have been identified according to the Station's existing land use map presented in the MCAS El Toro Master Plan (MCAS El Toro, 1991)

Screening of excess real property at MCAS El Toro is currently being conducted in accordance with the Base Closure Community Redevelopment and Homeless Assistance Act of 1994. The following agencies have submitted requests for MCAS El Toro property:

- o Air National Guard
- o Department of Interior

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- o Department of Justice/Bureau of Prisons
- o Federal Aviation Administration
- o Immigration and Naturalization Service
- o Marine Corps Exchange

Status of Environmental Restoration Program

A total of 24 sites are currently being investigated in the Installation Restoration Program (IRP) at the Station. Of these, 22 sites were evaluated during the Phase I Remedial Investigation (RI), which was completed in May 1993. A work plan for the Phase II RI is currently being prepared. Two additional sites were established for investigation in Phase II, bringing the total number of IRP sites to 24.

The IRP sites have been grouped into three operable units (OUs). In December 1994, two of the OUs were subdivided by the parties to the Federal Facilities Agreement (FFA). The OUs are currently defined as follows:

- o OU-1: Groundwater on- and off-Station that is contaminated with constituents that have migrated from the Station.
- o OU-2: Potential source areas of volatile organic compound (VOC) groundwater contamination.
 - OU-2A: Two sites (Sites 24 and 25) that are believed to be contributing to the VOC plume emanating from the southwest portion of the Station.

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- OU-2B: Two Station landfills (Sites 2 and 17) that will require further investigation and groundwater monitoring and will likely have presumptive remedies applied.
- OU-2C: Two Station landfills (Sites 3 and 5) that will undergo further groundwater monitoring.
- o OU-3: Includes those IRP sites not addressed in the other OUs.
 - OU-3A: Sites 1, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 19, 20, 21, and 22.
 - OU-3B: Sites 4 and 13, which are scheduled for early actions.

The FFA specifies that the Records of Decision (RODs) for each OU be completed by the following dates:

- o OU-1 is scheduled to be completed by the end of 1995.
- o OUs 2A and 2B are scheduled to be completed by mid-1997.
- o FFA schedules for OU-2C and OU-3A are currently in the process of being negotiated.
- o OU-3B will not be included in the Phase II RI. Action memoranda are scheduled to be issued in the first half of 1996 and the Final Engineering Evaluation/Cost Analyses (EE/CAs) are scheduled to be completed by mid-1996.

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A RCRA Facility Assessment (RFA) was performed at the Station between 1991 and 1993. Over 300 solid waste management units/areas of concern (SWMUs/AOCs) were identified in this program; of these, 140 were included in a sampling effort. One of the objectives of the RFA was to identify sites for possible inclusion into an OU-4 of the IRP. Although various SWMUs/AOCs were recommended for further action, none of these was proposed for inclusion into OU-4. At this time, there are no sites in OU-4 for MCAS El Toro.

The RFA Report has been approved by the California Environmental Protection Agency (Cal-EPA), contingent upon performing additional investigation at 10 SWMUs/AOCs. This additional investigation will be conducted in 1995.

Initiatives for Accelerating Cleanup

The BCT has conducted a "Bottom Up" review of the environmental programs at MCAS El Toro in accordance with *DOD Guidance on Establishing Base Realignment and Closure Cleanup Teams* (DOD, 1993). During the "Bottom Up" review process, the following 10 issues were addressed to identify opportunities for accelerating cleanup activities necessary to facilitate conveyance of real property at the Station:

- a. Technology Review: Publications such as "Treatment Technologies Applications Matrix for Base Closure Activities," prepared by the California Military Base Closure Environmental Committee, dated November 1993, will be reviewed as part of the evaluations performed in selecting technologies.

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- b. **Immediate Removal Actions:** An underground storage tank (UST) Tiger Team has been formed at the Station to address compliance and closure issues related to USTs on-Station. The Tiger Team has identified 70 inactive USTs for immediate removal in 1995. The Tiger Team is currently developing strategies for removing the remaining inactive USTs during 1996.
- c. **Clean Properties:** A base-wide Environmental Baseline Survey (EBS) is being prepared for MCAS El Toro. A draft version of the EBS Report was submitted to the U.S. Environmental Protection Agency (EPA) and Cal-EPA on 11 November 1994. The Draft EBS Report identifies 20 parcels (approximately 2,500 acres) at the Station as being potentially uncontaminated under CERFA. The CERFA-eligible parcels are still under review by EPA and Cal-EPA. Concurrence from these agencies is anticipated in late March 1995. The Final EBS will be submitted to Naval Facilities Engineering Command (NAVFACENGCOM) by 01 April 1995.
- d. **Overlapping Phases:** As an ongoing effort, the BCT will continue to identify phases of the cleanup process that can be overlapped to produce a potential reduction in the time required for completion of the cleanup process. As such, areas of overlap include the following:
 - o The RFA was conducted concurrent with the Phase I RI.
 - o Treatability studies will be conducted during the early stages of the OU-2 RI.

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- o EE/CAs will be conducted simultaneously with the Phase II RI activities.
- e. Contracting Procedures: A global Remedial Action Contract (RAC) was executed with OHM Remediation Services Corporation (OHM) to conduct response actions on installations within the footprint of Southwest Division, Naval Facilities Engineering Command (SWDIV). NAVFACENGCOM management of the Comprehensive Long-term Environmental Action Navy (CLEAN), RAC, and Indefinite Quantity contractors has been based on a cooperative and interactive approach. Active participation by all members of the Project Team results in a bias for action.
- f. Community Reuse Interface: The Station's BRAC Office is providing communication with interested parties (i.e., City of Irvine, City of Lake Forest, and County of Orange) to the development of the reuse plan.
- g. Bias for Cleanup: The BCT will continue to emphasize expedited remedial actions and attempt to avoid lengthy site characterization studies and prolonged remedial investigation/feasibility study (RI/FS) activities. As such, the BCT members will continue to collaborate in devising work plans, identifying cleanup criteria, and selecting remedial actions in an effort to aggressively pursue cleanup instead of studies and data collection.
- h. Validation of Technology: The BCT and BRAC Project Team have been formed to include technical, operational, reuse, and administrative specialists who provide input and support on efforts to achieve

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accelerated cleanup and transfer of Station property. Some of the project team members include representatives from the following:

- o EPA, Cal-EPA, and other local regulatory agencies (i.e., Orange County Health Care Agency [OCHCA])
 - o SWDIV
 - o MCAS El Toro BRAC Office
 - o MCAS El Toro Environmental Department
 - o MCAS El Toro Engineering Division
 - o MCAS El Toro Planning Department
 - o CLEAN Contractors
- i. Presumptive Remedies: Review of technologies for expediting remedies will be conducted during the RI/FS. As such, OU-2B has been redefined to include two Station landfills (Sites 2 and 17) that will require further investigation and groundwater monitoring and will likely have presumptive remedies applied. Presumptive remedies, as appropriate, will also be considered for other sites.
- j. Partnering: A partnering agreement among the Project Team is essential for efficient management of the base closure process. The BCT has established a partnering agreement and Team Charter that incorporates the latest and most efficient management techniques to coordinate installation restoration activities.

The following Team Charter agreement for MCAS El Toro was developed during a team-building seminar that was held in October 1994:

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"We, the MCAS El Toro partners, commit to effectively working together to maximize restoration and reuse of MCAS El Toro by 1999. We will accomplish this goal through teamwork, dedicated and focused participation, our ethics outlined below, and effective communication between all partners."

"We want the project to be enjoyable to work on and will work together with trust and respect, and will ensure that all team members interests impact decisions. Problems will be resolved quickly or escalated if appropriate, and by team members closest to the issue. As partners, we commit to communicating our mission and partnership goals to new project members and encourage them to embrace this partnership."

"Our mutually agreed upon ethical standards are listed below"

CODE OF ETHICS

- | | |
|--------------------------|----------------------|
| o Integrity | o Honesty |
| o Trust | o Openness |
| o Model the behavior you | o Dependable |
| o Expect from others | o Respectful |
| o Sincere | o Be a good listener |
| o Empathetic | o Accountable |
| o Value other's opinions | o Have fun |
| o Responsible | o Credible |
| o Honor diversity | o Be candid |

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Summary of Current BCP Action Items

Table ES-1 provides a listing of recommendations and issues associated with the environmental restoration and compliance that require further evaluation and action by the BCT. The list covers key items identified during the course of the BCP preparation and includes the BCT activities relating to the base closure.

The BCT has coordinated and managed a number of tasks relating to the BRAC cleanup activities at MCAS El Toro during the past year. A brief list of accomplishments include:

- o Established the Restoration Advisory Board (RAB) in April 1994
- o Established a UST Tiger Team to address UST compliance and closure issues
- o Developed an expedited UST removal program for 70 UST removals during 1995 and 91 removals in 1996
- o Identified RAC contractor to conduct response actions on bases within the footprint of SWDIV
- o Received approval of the RFA Report from Cal-EPA

Table ES-1 BCT/Project Team Action Items MCAS El Toro BCP - March 1995			
Action Items	Status		
	In Progress	To Be Performed	Completed
COMPLIANCE ACTIVITIES			
UST Removal/Compliance			
- Install UST monitoring systems	X		
- Remove 70 inactive USTs in 1995	X		
- Remove 91 inactive USTs in 1996		X	
RCRA Facilities			
- Further investigate 10 SWMUs/AOCs per DTSC recommendations	X		
Oil/Water Separators (OWSs)			
- Remove inactive OWSs		X	
- Evaluate active OWSs for removal after 1999		X	
PCBs			
- Evaluate past PCB transformer storage areas		X	
- Perform PCB Transformer Survey			X
Hazardous Waste Management			
- Maintain current compliance program	X		
- Close permitted storage facility (Building 673 -T3) by September 1995	X		
Wastewater Discharges			
- Maintain compliance with NPDES Permit	X		
Air Emissions			
- Prepare RECLAIM permit application			X
- Maintain current compliance program	X		
- Comply with air regulations when implementing remedial actions		X	
Lead-Based Paint			
- Conduct survey of housing facilities	X		
Asbestos			
- Conduct survey of housing facilities	X		
Cleanup Standards			
- Develop cleanup standards for various media	X		
Conceptual Models			
- Update conceptual site models		X	

Table ES-1 BCT/Project Team Action Items MCAS El Toro BCP - March 1995			
Action Items	Status		
	In Progress	To Be Performed	Completed
Risk Assessments			
- Update risk assessment		X	
Early Action Items			
- Identify opportunities	X		
- Implement opportunities		X	
CERCLA 120(h)(3) CONSIDERATIONS			
- Develop a comprehensive Environmental Baseline Survey (EBS)	X		
- Develop an inventory of sites recommended for no further action	X		
COMMUNITY RELATIONS			
- Update the community relations plan as required	X		
- Maintain and update the mailing list	X		
- Maintain the information in the repository	X		
- Update the administrative record quarterly	X		
- Publish updated fact sheets	X		
- Publish public notices as needed	X		
MANAGEMENT AND ADMINISTRATIVE SUPPORT ACTIVITIES			
Data Management			
- Update and maintain Geographic Information System	X		
- Update and maintain database of analytical results from environmental sampling programs	X		

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Chapter 1

Introduction and Summary

This document presents the Base Realignment and Closure (BRAC) Cleanup Plan (BCP) for Marine Corps Air Station (MCAS) El Toro (or Station). This report was prepared in partial fulfillment of Contract Task Order (CTO) No. 284 issued by Southwest Division, Naval Facilities Engineering Command (SWDIV) under the Comprehensive Long-term Environmental Action Navy (CLEAN) Program.

In March 1993, MCAS El Toro was placed on the proposed BRAC III list of military facilities considered for base closure. MCAS El Toro was formally selected for closure in September 1993. Closure of MCAS El Toro is planned to be complete in July 1999.

As a result of past waste management practices at MCAS El Toro, some areas are known or suspected to have become affected by various hazardous substances, pollutants, contaminants, or wastes. In response to these conditions, a number of environmental restoration programs have been performed and/or are ongoing at the Station. In addition, the Station has compliance programs in place intended to ensure that waste and resource management practices are conducted in a manner that protects human health and the environment.

The BCP summarizes the current status of MCAS El Toro's environmental restoration and compliance programs and provides a comprehensive strategy for implementing response actions necessary to protect human health and the environment. This strategy integrates activities being performed under both the Installation Restoration Program (IRP) and the associated environmental compliance programs to support full restoration of the Station.

The initial version of the BCP was submitted to Naval Facilities Engineering Command (NAVFACENGCOM) on 21 March 1994. This version of the BCP was prepared with information available as of February 1995. The BCP is a dynamic planning document that will be updated on an annual basis. As such, information, schedules, and remedial actions (RAs) presented in this document are subject to change. Because some of the currently available information is incomplete, certain assumptions and interpretations were made to develop strategies and cost estimates for future environmental work. As additional information becomes available, programs, schedules, and costs will change. The BCP will be updated to reflect changes that occur.

This BCP has been organized and prepared according to guidance presented in the *BRAC Cleanup Plan (BCP) Guidebook* (DOD, 1993) developed by DOD dated Fall 1993. The document is organized as follows:

Section 1.0 discusses the objectives of the environmental restoration program, the purpose of the BCP, the BRAC Project Team (Project Team), and the history of MCAS El Toro.

Section 2.0 provides a summary of the current status of the property disposal planning process for MCAS El Toro and describes the relationship of the disposal process with other environmental programs.

Section 3.0 summarizes the past history and current status of the IRP and environmental compliance programs at MCAS El Toro. This section also presents the environmental condition of property at the Station. The status of natural and cultural resources and the community relations activities that have occurred to date, are also discussed.

Section 4.0 describes the Station-wide environmental restoration and compliance program strategy for MCAS El Toro. This section includes discussions of current plans for remedial activities and other responses associated with the IRP sites and compliance program issues. This section also addresses the strategies for the Station's natural and cultural resources and public relations.

Section 5.0 provides master schedules of planned and anticipated activities to be performed throughout the duration of the MCAS El Toro environmental restoration program.

Section 6.0 presents discussions of specific technical and other issues associated with the environmental restoration that are yet to be resolved, and provides strategies for resolving these issues.

In addition to the main text of this document, the following appendices are included:

- o Appendix A - Tabular summaries of funding requirements and past costs for the environmental restoration program.
- o Appendix B - Listings of previous environmental restoration program deliverables by program and by site, and the references.
- o Appendix C - Summaries of decision documents for remedial action selections for IRP sites. Currently, none exist for MCAS El Toro.

- o Appendix D - Summaries of decision documents for no further response action planned (NFRAP) decisions for IRP sites. Currently, none exist for MCAS El Toro.
- o Appendix E - Conceptual site models for IRP sites.

1.1 ENVIRONMENTAL RESPONSE OBJECTIVES

The objectives of the environmental restoration program for MCAS El Toro include the following:

- o Expedite and improve environmental response actions in order to facilitate the disposal and reuse of MCAS El Toro
- o Protect human health and the environment
- o Comply with existing federal, state, and local statutes and regulations
- o Conduct IRP activities in a manner consistent with Section 120 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA)
- o Meet the provisions of the Federal Facilities Agreement (FFA)
- o Continue efforts to identify potentially contaminated areas

- o Establish priorities for environmental restoration and restoration-related compliance activities (so that property disposal and reuse goals can be met)
- o Design schedules and estimate costs for performing remedial activities for IRP sites and compliance program issues
- o Identify and map areas suitable for transfer by deed/lease and areas unsuitable for transfer by deed

1.2 BCP PURPOSE, UPDATES, AND DISTRIBUTION

The purpose of the BCP is to summarize the status of MCAS El Toro's environmental restoration and compliance programs and to provide a comprehensive strategy for addressing environmental restoration and restoration-related compliance activities. The BCP provides schedules of restoration activities in support of Station closure. In addition, it defines the status of efforts to resolve technical issues so that continued progress and implementation of scheduled activities can occur.

The BCP will be updated and modified annually to reflect status, strategy, and schedule changes, as well as issue resolution.

The BCP document and subsequent update materials will be distributed to the BCT and identified interested parties. Updated BCP documents will also be kept at the MCAS El Toro information repository locations. Currently, two repositories for MCAS El Toro restoration information

have been designated: Heritage Park Public Library located in Irvine, California and MCAS El Toro Library located on-Station. An additional off-Station repository may be identified when the Station is closed.

1.3 BRAC CLEANUP TEAM/PROJECT TEAM

The MCAS El Toro BCT was established in October 1993. The responsibilities of the BCT include management of the BCP process and preparation of MCAS El Toro's BCP. The BCT will also serve as the decisionmaking body for the efforts of the Project Team. Members of the BCT include representatives from the Department of Navy/United States Marine Corps (DON), U.S. Environmental Protection Agency (EPA), and the California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC). The DON representative serves as the BRAC Environmental Coordinator (BEC).

The BCT is supported by the Project Team, which is comprised of individuals capable of providing technical, operational, reuse, and administrative assistance. Table 1-1 (Current BCT/Project Team Members) identifies the BCT and Project Team members, along with their roles and responsibilities.

1.4 BRIEF HISTORY OF INSTALLATION

The following sections present a summary of the background, site history, and environmental setting for MCAS El Toro. Included is information on activities that may have contributed to environmental contamination at the Station.

1.4.1 Site Location

MCAS El Toro is located in south-central Orange County, California, about seven (7) miles east of MCAS Tustin and 12 miles inland (north-northeast) of the coastal City of Newport Beach, as shown in Figure 1-1 (MCAS El Toro Location Map). MCAS El Toro is bordered on the northwest, south, and west by the City of Irvine and on the east by the City of Lake Forest. The exact location of MCAS El Toro is 33° 38' to 33° 41' north latitude, 117° 41' to 117° 45' west longitude, Township 6 South, Range 6 West (T6S/R6W) (Sections 2-5, 7-11, 16-17, 20-21) and T5S/R8W (Sections 32-33, 35).

MCAS El Toro encompasses approximately 4,738 acres (about 7.4 square miles). Approximately 800 acres of Station property are currently designated for agricultural outleases. Agricultural outleased lands are located at corners of the Station and are used for plant nurseries and crop production. Crops grown on-Station include strawberries, winter celery, tomatoes, and oranges (MCAS El Toro, 1991).

1.4.2 Site History

Construction of a United States Marine Corps (USMC) pilots' fleet operational training facility began in July 1942 on 2,319 acres in Orange County, California. On 17 March 1943, that facility was commissioned as MCAS El Toro. In 1950, the Station was selected for development as a master jet air station and permanent center for Marine aviation on the West Coast to support the operations and

combat readiness of Fleet Marine Forces, Pacific. Between 1944 and 1986, an additional 2,419 acres of land were acquired to bring the Station to its current size of 4,738 acres.

The mission of MCAS El Toro has been to maintain and operate facilities and to provide services and material to support the operation of aviation activities and the units of the operating forces of the USMC. MCAS El Toro also provides support for other activities designated by the Commandant of the Marine Corps, in coordination with the Chief of Naval Operations.

A history of operations at the Station is provided in Table 1-2 (History of Installation Operations). This table also provides a summary of historic hazardous substance activities at the Station. The locations of these activities are shown in Figure 1-2 (Location of Past Hazardous Substance Activities).

The mission of MCAS El Toro has involved the operation and lower echelon maintenance of a relatively large number of military aircraft and ground support equipment. An inventory of hazardous wastes generated at the Station during 1993 is provided in Table 1-3 (Hazardous Waste Generating Activities). The generation of hazardous wastes is a result of operations at various locations throughout the Station, as listed below.

- o Aircraft maintenance hangars

- o Maintenance shops for automobiles, aircraft ground support equipment, vehicle equipment, and construction equipment
- o Auto hobby shop and Marine Corps Exchange auto repair station
- o Washracks and steam-cleaning facilities
- o Hazardous, flammable, and unused chemical materials storage areas
- o Aircraft fueling stations, tactical airfield fuel dispensing systems (TAFDS), and fuel farms

Hazardous wastes typically generated from aircraft and vehicle maintenance, degreasing processes, and painting include: waste oil, fuels, hydraulic fluid, lube oil, antifreeze, cleaning solvents, paints, paint stripper, paint thinner, batteries, and contaminated rags and absorbents.

Hazardous waste is also generated at the fuel storage areas when fuel storage tanks are cleaned and sludge is pumped out, or when fueling/defueling or loading/unloading operations result in spills.

Wash water from washracks is passed through oil/water separators (OWSs). The effluent water is discharged to the sanitary sewer or the storm drain, and the waste oil is handled as hazardous waste. OWSs are located at various buildings throughout the Station.

Previous operations that are no longer in existence at MCAS El Toro, but that were or may have been significant in past waste generation and disposal procedures, include the following:

- o For approximately 6 months during the 1940s, aircraft refurbishing operations were conducted in the southwest portion of the Station, and were centered in Buildings 296, 297, and 324. Refurbishing operations consisted of cleaning and plating activities that may have included the use of solvent materials (the types of materials used in the tanks is unknown). Wastewater from this 6-month operation was discharged to currently abandoned industrial wastewater sewer lines and treated at the former Industrial Wastewater Treatment Plant. Based on aerial photographs, this plant was present in the 1940s and was demolished by 1965.
- o Sewage was treated at an on-Station plant that was constructed in 1943, abandoned in 1972, and demolished in the late 1970s.
- o Incineration was performed at a facility that was operated between 1943 and 1955 to burn municipal-type waste generated by Station housing and other activities. The purpose of the incinerator was to reduce waste volume. Ash from the incinerator was disposed of in the Original Landfill.
- o Solid waste was disposed at four landfills on-Station. The Original Landfill (IRP Site 3) was operated from 1943 to 1955 and received wastes including municipal solid waste, paint residues, oily wastes, and industrial solvents ash from an incinerator

formerly located adjacent to the landfill was also disposed of at this site. Perimeter Road Landfill (IRP Site 5) was operated from 1955 to the late 1960s and received municipal solid waste, unspecified fuels, solvents and cleaning fluids, scrap metals, paint residues, and unspecified oily wastes. Solid wastes were burned in-place at the Perimeter Road Landfill for volume reduction. After open burning at the Station was discontinued in the late 1960s, garbage was transported to Magazine Road Landfill (IRP Site 2), where it was landfilled through 1980. Materials landfilled at this site included municipal solid wastes, unspecified industrial wastes, lead batteries, transformers, various petroleum wastes, and industrial solvents.

- o Two burn pit areas were operated for fire training exercises. Crash Crew Pit No. 1 (IRP Site 9), located in the southwest portion of the Station, was operated from 1965 through 1971. Crash Crew Pit No. 2 (IRP Site 16) is located near the center of the Station and was operated from 1972 to about 1975. The sites consisted of unlined pits that were filled with water and layered with various flammable liquids including JP-5 fuel, aviation gasoline, and other waste liquids. A third lined burn pit area is currently operational.
- o Pesticides/herbicides have historically been used at the Station to control rodents and weeds. Chemicals used in the past include Thurshan, Diazonan, Chlordane, Crovar, Malathion, Kelthane, Strychnine, DDT, and Retard-X.

1.4.3 Environmental Setting

Climate. The climate at MCAS El Toro is a typical Mediterranean climate, which is characterized by cool, moist winters and warm, dry summers. Temperatures in the winter seldom drop below 37°F. Summer temperatures rarely exceed 100°F. Average annual precipitation is about 12 inches and occurs primarily in the winter.

Early morning light fog and low clouds are common in the late spring and early summer. Dry winds, known as *Santa Ana Winds*, with velocities up to 70 miles per hour, occur for short periods during the late fall and early winter (Brown and Caldwell, 1986).

Setting and topography. MCAS El Toro is situated on the southeastern edge of the Tustin Plain, a gently sloping surface of alluvial fan deposits derived mainly from the Santa Ana Mountains (Yerkes et al., 1965). The Tustin Plain, bounded on the north and east by the Santa Ana Mountains and on the south by the San Joaquin Hills, is at the southeast end of the Los Angeles Basin, a large sedimentary basin in the Peninsular Ranges Geologic Province (Yerkes et al., 1965). The Plain also lies in the so-called "Central Block" of the Los Angeles Basin, which is bound on the north by the Whittier Fault zone and on the south by the Newport-Inglewood Fault zone (CDMG, 1984).

The MCAS El Toro boundaries extend across the Tustin Plain into the Santa Ana Mountains. Most of the Station slopes gently down to the west-southwest. Elevations range from about 215 feet above mean sea level (msl) in the west corner of the facility to about 800 feet

above msl in the east corner in the foothills of the Santa Ana Mountains. The Santa Ana Mountains rise steeply north and east of the Station; their highest peak (6,698 feet) is 10 miles east of the Station. The San Joaquin Hills slope up gradually to the south; their highest point (1,170 feet above msl) is 10 miles south of the Station (Brown and Caldwell, 1986). The land to the northwest of the Station is relatively level.

Surface water. Surface drainage near MCAS El Toro generally flows southwest, following the slope of the land perpendicular to the trend of the Santa Ana Mountains. Several washes originate in the hills northeast of the Station and flow through or adjacent to the Station en route to San Diego Creek. Off-Station drainage from the hills and upgradient irrigated farmlands combines with on-Station runoff (generated from the Station's extensive paved surfaces) at the Station and flows into four main drainage channels. Three of these drainage channels are continuous with natural washes that originate in the Santa Ana Mountains (Borrego Canyon, Agua Chinon, and Bee Canyon); the fourth channel is Marshburn Channel. All four drainages become confluent with San Diego Creek southwest of the Station.

Geology. MCAS El Toro lies on alluvial fan deposits derived mainly from the Santa Ana Mountains. These Holocene materials consist of isolated coarse-grained stream channel deposits contained within a matrix of fine-grained overbank deposits that range in thickness up to a maximum of 300 feet (Herndon and Reilly, 1989).

The Holocene alluvial materials conformably overlie Pleistocene Age sediments predominantly composed of interlayered fine-grained lagoonal and near-shore marine deposits. These materials become increasingly mixed with beach sands, terrace, and stream-channel deposits in the eastern portion of the Tustin Plain and along the plain margins. Thus, the Quaternary deposits form a heterogeneous mixture of silts and clays with interbedded sands and fine gravels that range in thickness up to 500 feet in the western portion of the Tustin Plain (Singer, 1973).

The deeper Quaternary sediments may be equivalent to the lower Pleistocene San Pedro Formation, which consists of semiconsolidated silts, clays, and sands with interbedded limestone. These lagoonal and shallow marine deposits are considered to be a major water-bearing unit in the region (Brown and Caldwell, 1986).

The Pleistocene deposits unconformably overlie older semiconsolidated marine sandstones, siltstones, and conglomerates of late Miocene to late Pliocene age; these units make up the Niguel, Fernando, and Capistrano Formations. These semiconsolidated sediments are considered the top of the bedrock near MCAS El Toro. The lower Pliocene Fernando Formation, considered to be the major aquifer in the Irvine area, is the base of the water-bearing units (Herndon and Reilly, 1989). This formation probably interfingers with marine clayey and sandy siltstones of the Capistrano and Niguel Formations west of MCAS El Toro, and together they range up to 1,500 feet in thickness (JMM, 1988).

Beneath the semiconsolidated rocks lies a very thick sequence of interbedded marine and nonmarine sedimentary rocks and volcanic rocks of the Monterey, Puente, Vaqueros, and Sespe Formations. These units, which are deposited on a basement of crystalline metamorphic and igneous rocks, have been considered to be nonwater bearing in previous studies (JMM, 1988).

Groundwater. MCAS El Toro is situated over the Irvine Subbasin in the Main Orange County Basin. Although the aquifers beneath the Tustin Plain are in hydraulic contact with the Main Orange County Groundwater Basin, it is difficult to make correlations among specific aquifer zones. In the Irvine area, aquifers are much thinner and separated by thicker sequences of fine-grained materials (Banks, 1984). Aquifers tend to be composed of lenticular clayey and silty sands and fine gravels contained within a complex assemblage of sandy clays and sandy silts. Thus, rather than identifiable aquifers that may be correlated from place to place, the groundwater may be considered to flow in a single, large-scale heterogeneous system (Herndon and Reilly, 1989).

The groundwater system beneath the Irvine Subbasin has been divided into a forebay area and a pressure area. The forebay area lies along the margin of the Basin where relatively shallow and coarse-grained sediments overlie semiconsolidated rock. Groundwater is thought to occur under unconfined conditions in this area. Recharge to the regional system takes place in the forebay area, primarily along washes that exit the Santa Ana Mountains. The pressure area lies in the central portion of the basin, where sediments are thicker and relatively

finer-grained. Productive aquifers in this area are present mainly in deeper zones that become increasingly confined with depth. The groundwater has historically been discharged through irrigation wells or has moved westward to the Main Orange County Basin (Banks, 1984).

In 1989, along the southwest perimeter of the Station, the depth to groundwater ranged from 82 to 122 feet bgs (JMM, 1988). Reduced pumping and increased water imports in the past 20 years have allowed groundwater levels to rise as much as 100 feet (Herndon and Reilly, 1989). Groundwater within the foothills, where it occurs, is reported to be within 50 feet of the ground surface (JMM, 1988). Information gathered during Phase I Remedial Investigation (RI) drilling shows that depth to groundwater is generally consistent with those above. Groundwater is most shallow in the foothills, where it lies about 45 to 60 feet beneath the washes.

According to 1989 water levels, the direction of flow along the southwest boundary of MCAS El Toro was northwest at a gradient of 0.0066 (JMM, 1988). Regional flow has been west and northwest since the 1940s and has been controlled locally by large pumping depressions. Phase I RI data indicate that regional groundwater flow is still toward the northwest, with an average groundwater gradient of about 0.008.

The average linear groundwater flow velocities in the uppermost aquifer across the Station are in the range of 0.02 to 1.9 feet per day (ft/day). Average linear groundwater flow velocities in localized areas in the deeper coarse-grained portion of the aquifer that supplies groundwater

to production wells are likely to be higher than that in the uppermost aquifer. An average linear groundwater velocity of 1.5 ft/day was calculated based on the hydraulic conductivity of 56.8 ft/day estimated from a 24-hour pumping test completed by Orange County Water District (OCWD), an average hydraulic gradient of 0.008, and a porosity of 0.3.

Groundwater chemistry. In addition to the regional volatile organic compound (VOC) groundwater contamination being investigated at the Station (refer to Subsection 3.1.1), historical degradation of shallow groundwater quality associated with other contaminants has occurred in the Irvine area. Increases in the levels of total dissolved solids (TDS), selenium, and nitrates in the groundwater have been related to agricultural activities and incursions of lower-quality water from the margins of the Basin under the influence of pumping wells. The largest area of groundwater not affected by this contamination lies in deeper zones in the central pressure area of the Basin (Banks, 1984).

Investigations by OCWD northwest of the Station have revealed the presence of three hydrochemical facies in groundwater related to depth in the aquifer. The first facies, characteristic of shallow groundwater lying within 200 feet of the ground surface, contains relatively high levels of TDS and nitrate and is dominated by calcium and sulfate ions. The second facies, characteristic of groundwater lying between 200 and 450 feet deep, contains lower levels of TDS and nitrate and is dominated by sodium, calcium, and bicarbonate ions; this zone is where off-Station VOC contamination has occurred. The third facies occurs in the lower hydrogeologic system at depths greater than 450 feet and

contains relatively high levels of TDS, relatively low levels of nitrate, and is dominated by sodium and sulfate ions (Herndon and Reilly, 1989). Preliminary work performed at MCAS El Toro by James M. Montgomery Engineers (JMM) and Phase I RI data have generally confirmed these findings (JMM, 1988 and Jacobs, 1993a).

1.5 OFF-BASE PROPERTY/TENANTS

The following sections present information regarding on-Station tenants, existing off-Station land use, historic property acquisitions, and off-Station properties.

Tenant units. A list of major tenants and their building locations at MCAS El Toro is provided in Table 1-4 (On-Base Tenant Units). The buildings occupied by each tenant are also provided in this table. Noncomponent (e.g., FAA) tenants are not undertaking any environmental restoration activities.

Existing off-base land use. Historically, the land use around MCAS El Toro has been largely agricultural. However, land to the south, southeast, and southwest has been developed recently as commercial, light industrial, and residential. Currently expanding commercial areas include the Irvine Industrial Complex-East, located on the southeast border of the Station, and the Irvine Technology Center, located along the southwest border of the Station. Adjacent land on the northwest and northeast is used for agriculture. Regional land use around the Station is shown in Figure 1-3 (Existing Off-Base Land Use).

Property acquisitions. MCAS El Toro has more than doubled in size since the original acquisition of 2,319 acres in 1942. The Station currently consists of 4,738 acres. A summary of MCAS El Toro property acquisitions is provided in Table 1-5 (Property Acquisition Summary). The tracts referenced in this table correspond to Figure 1-4 (MCAS El Toro Property Acquisitions).

Off-base property. MCAS El Toro currently uses several properties that are not located directly on-Station. These properties, listed in Table 1-6 (Off-Base Properties), include a recreation facility and obstruction lighthouse facilities. The location of the recreation facility relative to the Station is shown in Figure 1-1; refer to Figure 1-5 (Off-Base Parcels) for the obstruction lighthouse locations.

The Big Bear Recreation Facility consists of 6.5 acres and is located approximately 75 miles northeast of the Station in Big Bear, California. This property is used by the Station under a memorandum of understanding (MOU) with the U.S. Forest Service; the Navy owns the facilities on the property. These facilities are administered by the MCAS El Toro Morale, Welfare, and Recreation Office (MWR). The Navy plans to extend the MOU after MCAS El Toro is closed (personal communication, G. Horner/MCAS El Toro MWR, March 1994).

Three small properties for obstruction light houses associated with the Station's air operations are located off-Station. Two of the lighthouses (Buildings 586 and 588) are located east of the Station and one lighthouse (Building 595) is located north of the Station. The plans for

these properties and structures after closure of the Station are not known.

In addition to the off-Station properties discussed above, MCAS El Toro currently administers approximately 40 acres of land located in the City of Tustin, adjacent to MCAS Tustin. The property is currently being used as Station housing for both MCAS El Toro and MCAS Tustin personnel; some of this property is also vacant. Because of its geographical location (i.e., adjacent to MCAS Tustin, but a few miles from MCAS El Toro), this property is being addressed in the BCP for MCAS Tustin and is not included in this BCP.

Table 1-1
Current BCT/Project Team Members
MCAS El Toro BCP - March 1995

BCT MEMBERS			
Name	Title/Organization	Phone	Role/Responsibility
Joyce, Joseph	BRAC Environmental Coordinator - MCAS El Toro and Navy Southwest Division NAVFACENGCOM (SWDIV)	714/726-3470 616/532-3873	Department of Defense Component Project Manager (Lead Agency)
Arthur, Bonnie	Project Manager - U.S. Environmental Protection Agency, Region IX (EPA)	415/744-2389	USEPA - Region IX, Lead
Jimenez, Juan	Project Manager - California EPA, Department of Toxic Substances Control (DTSC)	310/590-4919	Cal-EPA (DTSC), Lead
OTHER KEY PARTICIPANTS			
Name	Title/Organization	Phone	Role
Ashman, Jason	SWDIV	619/532-1164	MCAS El Toro RPM, OUs 2 and 3
Baynard, Major Frank	MCAS El Toro BRAC Office	714/726-3389	Base Transition Coordinator
Best, Claire	DTSC	310/590-4949	Public Participation Specialist
Christiansen, Captain Tom	MCAS El Toro, Installations	714/726-2266	MCAS El Toro Assistant Chief of Staff, Installations
Ciesla, Pete	MCAS El Toro BRAC Office	714/726-3389	Assistant Base Transition Coordinator
Crawley, David	SWDIV	714/726-4146	Fieldwork coordination & logistics
Dotson, Ann	COMCABWEST	714/726-3702	MCAS El Toro Planning Director
Dreyer, Kelly	Marine Corps Headquarters	703/696-2138	CMC/LFL Marine Corps Headquarters
Garelick, Virginia	SWDIV	619/532-2962	RTM, Technical Support
Hendron, James	Orange County Health Care Agency	714/667-3708	UST Program Oversight
Hornecker, Lynn	SWDIV	619/532-3939	RPM, Compliance Program Issues
Lee, Wayne	MCAS El Toro, Installations	714/726-3705	MCAS El Toro Director, Installations
Lowery, Richard	SWDIV	619/532-3345	RPM, Compliance Program Issues
Nuzum, Larry	BRAC Branch Manager - SWDIV	619/532-3655	Resource Management
Okuda, Ron	DTSC	310/590-4885	Environmental Assessment & Reuse Specialist
Parpiani, Vish	MCAS El Toro, Environmental Office	714/726-4432	Installation Restoration Program Manager
Phillips, Rick	SWDIV	619/532-3687	Contract Specialist
Piszkin, Andy	SWDIV	619/532-2635	Lead RPM/Technical Support
Rumsey, Ed	MCAS El Toro, Installations	714/726-2270	MCAS El Toro Director, Engineering Division
Sherwood, Paul	MCAS El Toro, Installations	714/726-6807	Operations Manager
Singh, Upinder	MCAS El Toro, Environmental Office	714/726-3035	Compliance Program Support
Vitale, Larry	Project Manager - CAL-EPA, Regional Water Quality Control Board (RWQCB)	909/782-4998	RWQCB - Santa Ana, Lead
Wilson, Barbara	COMCABWEST	714/726-6611	Natural/Cultural Resources

Table 1-1
Current BCT/Project Team Members
MCAS El Toro BCP - March 1995

CONTRACTORS			
Name	Agency Affiliation	Phone	Role
Arends, Michael/ CH2M HILL	Navy - SWDIV	714/250-1900	CLEAN I Project Manager
Pan, Max/ IT Corporation	Navy - SWDIV	714/660-5463	CLEAN I Technical Reviewer
Tedaldi, Dante/ Bechtel	Navy - SWDIV	619/687-8700	CLEAN II Technical Reviewer
Dolegowski, John/ CH2M HILL	Navy - SWDIV	714/250-1900	CLEAN I Site Manager
Cowser, Dave/ Bechtel	Navy - SWDIV	619/687-8700	CLEAN II Site Manager

Table 1-2 History of Installation Operations MCAS El Toro BCP - March 1995				
Period	Type of Operation	Weapon System	Hazardous Substance Activity	Map Reference (1)
Pre-1943	Agricultural	None	Potential pesticide use	VL
1943	New construction MCAS El Toro formally commissioned	None	Construction Landfilling STP and sludge drying beds Fuel/oil/chemical storage Discharge to washes Waste burning	VL 1 2 VL 3 8
1943 to 1945	465 aircraft assigned (F4U, TBM, R5C, C-54, SNJ) 15,470 personnel assigned	Fighter, Bombing, and Training Aircraft	Construction Landfilling Fuel/oil/chemical storage STP and sludge drying beds Discharges to washes UST petroleum/waste storage Oil/water separators Aircraft refurbishing operations Waste burning IWTP	VL 1 VL 2 3 VL VL 4 8 9
1946 to 1952	Marine aircraft groups assigned Aircraft (F4U, F7F, TBM, C-54, SNJ) 4,000 personnel assigned	Fighter, Bombing, Transport, and Training Aircraft	Petroleum disposal area Landfilling Fuel/oil/chemical storage STP and sludge drying beds Discharges to washes UST petroleum/waste storage Oil/water separators Aircraft refurbishing operations Waste burning IWTP	5 1 VL 2 3 VL VL 4 8 9

Table 1-2 History of Installation Operations MCAS El Toro BCP - March 1995				
Period	Type of Operation	Weapon System	Hazardous Substance Activity	Map Reference (1)
1952 to 1955	Aircraft fleet marine force assigned Marine aircraft groups assigned Aircraft (F3D, F9F, F6F, C-119, C-54, AD, HRS)	Fighters, Attack, Transports, Training Aircraft, and Helicopters	Explosive ordnance disposal Petroleum disposal area Landfilling Fuel/oil/chemical storage STP and sludge drying beds Discharges to washes UST petroleum/waste storage Oil/water separators Waste burning IWTP	6 5 1 VL 2 3 VL VL 8 9
1955 to 1960	One marine air wing (3d MAW relocated to MCAS El Toro from Miami, Florida) Aircraft (AD, A4D, F3D, F4D, F8U, F9F, C-119, C-54)	Fighter, Attack, Transport, Photographic, Reconnaissance, and Tanker Aircraft	Explosive ordnance disposal Petroleum disposal area Landfilling Fuel/oil/chemical storage STP and sludge drying beds Discharges to washes UST petroleum/waste storage Oil/water separators Waste burning IWTP	6 5 1 VL 2 3 VL VL 8 9
1961 to 1975	One marine air wing (3d MAW) Aircraft (AD, A4D, F4H, C-130) 8,600 personnel assigned	Fighter, Attack, and Tanker Aircraft	Explosive ordnance disposal Petroleum disposal area Landfilling Fuel/oil/chemical storage STP and sludge drying beds Discharges to washes UST petroleum/waste storage Oil/water separators Fire training area burn pits	6 5 1 VL 2 3 VL VL 7

Table 1-2 History of Installation Operations MCAS El Toro BCP - March 1995				
Period	Type of Operation	Weapon System	Hazardous Substance Activity	Map Reference (1)
1976 to 1985	One marine air wing (3d MAW) Aircraft (A4D, F4H, C-130)	Fighter, Attack, and Tanker Aircraft	Explosive ordnance disposal Petroleum disposal area Landfilling Fuel/oil/chemical storage Discharges to washes UST petroleum/waste storage Oil/water separators Fire training burn pits	6 5 1 VL 3 VL VL 7
1986 to 1991	One marine air wing (3d MAW). Includes: MAG -11 90 F/A-18 fighter attack aircraft 12 KC-130 fighter attack aircraft MAG -46 12 F/A-18 fighter attack aircraft 12 aircraft (CH-46) Station 3 Aircraft (UH-1) 3 Aircraft (UC-12) 1 Aircraft (CT-39) 7,200 personnel assigned	Fighter/Attack, and Inflight Refueler Aircraft, Helicopters and Logistic Transports	Petroleum disposal area Fuel/oil/chemical storage Discharges to washes UST petroleum/waste storage Oil/water separators Fire training burn pits	5 VL 3 VL VL 7
1991 to Present	One marine air wing (3d MAW). Includes: MAG -11 125 F/A-18 fighter attack aircraft 12 KC-130 fighter attack aircraft MAG -46 12 F/A-18 fighter attack aircraft (Reserve) 12 CH-46 helicopters	Fighter/Attack, and Inflight Refueler Aircraft, Helicopters and Logistic Transports	Fuel/oil/chemical storage Discharges to washes UST petroleum/waste storage Oil/water separators Petroleum disposal area Fire training burn pits	VL 3 VL VL 5 7

Table 1-2 History of Installation Operations MCAS EI Toro BCP - March 1995				
Period	Type of Operation	Weapon System	Hazardous Substance Activity	Map Reference (1)
1991 to Present (cont.)	Station UH-1 search and rescue helicopter UC-12, CT-39 logistic aircraft 8,000 personnel assigned			

Notes:

(1) Reference numbers correspond to locations shown in Figure 1-2
VL - Various Locations
STP - Sewage Treatment Plan
IWTP - Industrial Wastewater Treatment Plant

Sources:

MCAS EI Toro Master Plan, 1991.
MCAS EI Toro & Tustin Unofficial Guide and Directory, 1992.
MCAS EI Toro Command Museum Personnel.

Table 1-3 Hazardous Wastes Generating Activities MCAS El Toro BCP - March 1995				
Facility (Bldg.)	Activity	Name of Waste Material	Generation Rate (lbs/2 month)(1)	Disposition
Aero Club (10)	Small Aircraft Maintenance, (G, TAA)	Aviation gas	660	DRMO
Auto Hobby Shop (626)	Auto Repair Shop (G, TAA)	Absorbent w/fuel, oil	518	DRMO
		Misc. paints	264	
		Oil Filters	736	
		Antifreeze	544	
		Cleaning compound	266	
C-Pool (386)	Base auto and truck repair shop (G, TAA)	Gas fuses/filters	119	DRMO
CSSD-14 (388)	Hum V / Support Engine repair, Station (G, TAA)	Petroleum oil w/water	368	DRMO
		Aerosol prime coating	53	
		Aerosol vinyl spray	52	
		Absorbent w/fuel, oil	2,564	
		Petroleum oil w/solvents	996	
		Petroleum oil w/fuel	178	
		PD-680	124	
		Antifreeze	260	
		Rags w/fuel, oil	1,104	
FMD (370)	Maintain Base/ Buildings (G, TAA)	Paint remover	5,503	DRMO
		Misc. paint	55	
		Enamel paint	145	
		Spill debris w/oil	65	
		Epoxy polyimide paint	14	
		Antifreeze	98	
Fuels Division (314)	Gas and diesel supply to units (G, TAA)	Aviation turbine engine filters	937	DRMO
H & HS-38 (22)	Ground Control Unit (G, TAA)	Used oil/diesel filters	98	DRMO
		Paint thinner	203	
		Batteries (mercury)	74	
		Calcium Hypochlorite	52	
		Rags w/fuel, oil	102	
		Petroleum oil	332	
		Antifreeze	338	
MACG-38 (5)	Transportation and Power Electricity for MATCS-38 (G, TAA)	Antifreeze	178	DRMO
		Aerosol spray paint	94	
		Misc. paint	368	
		Soil w/fuel, oil	224	

Table 1-3 Hazardous Wastes Generating Activities MCAS EI Toro BCP - March 1995				
Facility (Bldg.)	Activity	Name of Waste Material	Generation Rate (lbs/2 month)(1)	Disposition
MAG-46 Helo (295)	Helicopters (G, TAA)	Rags w/fuel, oil	410	DRMO
		Rags w/synthetic oil	145	
		Petroleum oil	878	
		PD-680	314	
		Acidic cleaning compound	684	
		Plastic w/oil	116	
		Absorbent w/fuel, oil	1,523	
		Aerosol paint	124	
		Synthetic oil	868	
		Rags w/sealing compound	152	
		Plastic w/sealing compound	475	
MALS-11 Airframes (130)	Painting / Tire shop/ Welding (G,TAA)	Rags w/oil	688	DRMO
		Petroleum oil	316	
		Paintbooth sludge	6,670	
		Aerosol lacquer paints	154	
		Misc. paints	328	
		Paint Stripper	328	
MALS-11 (441)	Maintain Aviation Logistic Squadron (G, TAA)	Aircraft paint thinner	50	DRMO
		Methyl Ethyl Ketone	24	
		Absorbent w/fuel, oil	554	
		Rags w/fuel, oil	250	
		Freon	150	
		Batteries (magnesium/alkaline)	100	
		Batteries (mercury)	100	
MALS-11 Avionics (856)	Repair Avionics Equipment (G, TAA)	Sulfuric Acid spent	538	DRMO
		Rags w/fuel, oil	343	
		Rainwater w/oil	3,830	
		Batteries (lead acid)	126	
		Synthetic oil	145	
		Paint thinner	66	
		Rags w/PD-680	56	
		Corrosion Preventative Compound	138	
		Misc. paint	185	
		Primer	47	
		Sealing compound	39	
		Petroleum oil	269	
		Aerosol enamel paint	108	
		Alodine Corrosive Resistant	37	
		Absorbent w/hydraulic fluid	49	
		Aerosol cleaning compound	97	

Table 1-3 Hazardous Wastes Generating Activities MCAS El Toro BCP - March 1995				
Facility (Bldg.)	Activity	Name of Waste Material	Generation Rate (lbs/2 month)(1)	Disposition
MALS-11 Cryogenics (636)	Repair life emergency support equipment (G, TAA)	Petroleum oil	146	DRMO
MALS-11 GSE (673)	Ground equipment	Rags w/fuel, oil	934	DRMO
	Provide power/	Rags w/synthetic oil	688	
	Test Elect. System/	Rags w/oil	115	
	Service Hydraulics	Aerosol cleaning compound	35	
	fuels/ Start Engine	Absorbent w/fuel, oil	929	
	Maintain and Tow	Petroleum oil w/synthetic oil	539	
	Tractors (G, TAA)	25% Freon w/75% hydraulic fluid	784	
MALS-11 GSE North (392)	Ground equipment	Oil w/antifreeze	199	DRMO
	Provide power/	Synthetic oil	474	
	Test Elect. System/	Used oil/diesel filters	218	
	Service Hydraulics	Latex gloves w/synthetic oil	52	
	fuels/ Start Engine	Petroleum oil w/synthetic oil	230	
	Maintain and Tow	25% Freon w/75% hydraulic fluid	436	
	Tractors (G, TAA)	Aerosol cleaning compound	35	
		Rags w/fuel, oil	252	
MALS-11 Ordnance (673)	Explosives/ Bombs	Rags w/grease	108	DRMO
	Build work support equipment/	Corrosion Preventative Compound	44	
	Carry Ammunition/	Aerosol lacquer paint	118	
	Support Armory (G, TAA)	Rags w/oil	373	
		Petroleum oil	269	
		Aerosol enamel paint	108	
		Alodine corrosive resistant	138	
		Absorbent w/hydraulic fluid	49	
MALS-11 Power plants (634, 658)	Fix and maintain F404 and T54 Engine (G, TAA)	Aerosol Cleaning compound	97	DRMO
		Rags w/fuel, JP-5, Synthetic oil	1,129	
		JP-5 w/synthetic oil	487	
		Decon kit, part B	183	
MWR-Auto #1(651)	Auto Repair Shop (G, TAA)	Decon kit, part A	139	DRMO
		Grease	142	
		Fuel w/water	108	
		Used oil/diesel filters	698	
MWSS-373 Headquarters (800)	Repair and maintenance of Tactical Vehicles (G, TAA)	Petroleum oil	522	DRMO
		Aerosol spray paint	171	
		Rags w/fuel, oil	755	
		Aerosol enamel spray paint	238	
		Absorbent w/fuel, oil	925	
		Used oil/diesel filters	164	
		Antifreeze	154	

Table 1-3 Hazardous Wastes Generating Activities MCAS El Toro BCP - March 1995				
Facility (Bldg.)	Activity	Name of Waste Material	Generation Rate (lbs/2 month)(1)	Disposition
MWSS-373 Refuelers (67)	Refuel by truck (G, TAA)	Absorbent w/fuel, oil	374	DRMO
		Petroleum oil	878	
		PD-680	314	
		Acidic cleaning compound	684	
MWSS-373 Utilities (31)	Fix & maintain Generator/ Refer Equipment/ Laundry Unit Shower/ RO Water System (G, TAA)	Absorbent w/fuel, oil	438	DRMO
		Rags w/solvents	164	
		Petroleum oil	338	
SOMS	Emergency Arrestment (G, TAA)	Absorbent w/fuel, oil	104	DRMO
		Petroleum oil	218	
SOMS Recovery (2)	Emergency Arrestment (G, TAA)	Absorbent w/oil debris	78	DRMO
		Aerosol spray paint	193	
		Petroleum oil	1,298	
		Absorbent w/fuel, oil	136	
		Diesel w/water	574	
		Batteries (lead, acid)	150	
VMFAT-101 (371)	FA-18 Aircraft (G, TAA)	Corrosion preventative compound	67	DRMO
		Misc. paint	173	
		Enamel paint	101	
		Rags w/fuel, oil	1,063	
		Rags w/AC paint thinner	159	
		Absorbent w/fuel, oil	1,213	
		Cleaning compound (sodium hydroxide)	66	
		Cleaning compound (orthocresol)	687	
		Hydraulic fluid	1,966	
		Paint thinner	404	
		JP-5	1,192	
		Methyl Ethyl Ketone	96	
		Oil w/lead	100	
		Aliphatic isocyanate	168	
		Water w/oil	1,500	
		Sulfuric acid, spent	550	
		Rags w/synthetic oil	100	
		Paintbooth filters	218	
VMFA-225 AW (698)	FA-18 Aircraft (G, TAA)	Absorbent w/fuel, oil	260	DRMO
		Polyurethane coating	108	
		25% Freon w/75% hydraulic fluid	492	
		Synthetic oil	124	
		Rags w/solvent	150	

Table 1-3 Hazardous Wastes Generating Activities MCAS El Toro BCP - March 1995				
Facility (Bldg.)	Activity	Name of Waste Material	Generation Rate (lbs/2 month)(1)	Disposition
VMFA-242 (461)	FA-18 Aircraft (G, TAA)	Aerosol spray paint	127	DRMO
		Rags w/fuel, oil	140	
		Cleaning compound	1,318	
		Misc. paint	174	
		Synthetic oil	466	
		JP-5	312	
		Absorbent w/fuel, oil	136	
		Diesel w/water	574	
		Batteries (lead, acid)	150	
VMFA-323 (606)	FA-18 Aircraft (G, TAA)	Synthetic oil	1,159	DRMO
		Misc. paint	90	
		Acidic cleaning compound	78	
		Absorbent w/fuel, oil	448	
		Rags w/synthetic oil	1,320	
		Rags w/fuel, oil	340	
		Paint thinner	56	
		Rags w/solvent	118	
		Absorbent w/fuel, synthetic oil	780	
VMFA-314 (605)	FA-18 Aircraft (G, TAA)	Absorbent pads w/fuel, oil	150	DRMO
		Polyurethane coating	113	
		Epoxy polyimide coating	62	
		25% freon w/75% hydraulic fluid	312	
		Aerosol spray paint	72	
		Aerosol cleaning compound	36	
		Acidic cleaning compound	54	
		Aerosol enamel spray paint	28	
		Aerosol lacquer spray paint	56	
		Rags w/fuel, oil	360	
		Misc. paint	208	
		Absorbent w/fuel, oil	1,646	
		Rags w/ solvents	112	
		Enamel paint	558	
		Paint equipment, debris	76	
		Absorbent w/synthetic oil	109	
		Lacquer paint	53	
		JP-5 w/hydraulic fluid, synthetic oil	363	
		Synthetic oil	292	

Table 1-3 Hazardous Wastes Generating Activities MCAS EI Toro BCP - March 1995				
Facility (Bldg.)	Activity	Name of Waste Material	Generation Rate (lbs/2 month)(1)	Disposition
VMGR-352 (297)	KC-130 Aerial Transport, refuel Vow line (G, TAA)	25% Freon w/75% hydraulic fluid	442	DRMO
		Rags w/fuel, oil	403	
		Misc. paint	360	
		Enamel paint	105	
		Batteries (lead, acid)	400	
		Adhesive	60	
		Paint stripper	72	
		Aerosol spray paint	70	
		Synthetic oil	868	
		Hydraulic fluid	444	
		Absorbent w/fuel, oil	1,260	
Notes:				
(1) Generation rates are for July/August 1992				
G - Generator				
TAA - Temporary Accumulation Area (less than 90-day accumulation area)				
DRMO - Defense Reutilization and Marketing Office				
NA - Data Not Available				
The column in the BCP table entitled "Unit" is not included. According to EO staff, the unit column is the same as facility building.				
Source: SAIC, 1994. Draft Hazardous Materials Management Plan.				

Table 1-4 On-Base Tenant Units MCAS El Toro BCP - March 1995	
Tenant	Building Number(s)
13th Dental	20,105, 439, 457
3rd Marine Air Wing	139, 829, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921
Adjutant	46, 65, 420, 692
Aero Club	766
Aviation Physiology Training Unit	684
Aviation Weapons Training Unit	826
Aviation Weapons Training Unit- 3	405, 406, 407, 407, 409, 1721, 1809
CACI	456
CEO	757, 773, 774, 775, 776, 777
Chaplin	83, 581, 833
Comptroller	66, 304, 475
Crash Crew	850, 851
Combat Service Support Detachment-14	147, 273, 313, 333, 387, 388, 655, 759, 760
Defense Commissary Agency	317, 329
Defense Logistics Agency	197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 547, 548, 549, 550, 551
Defense Reutilization Marketing Office	319, 633, 784
Explosive Ordnance Disposal	780, 794, 795
Federal Aviation Administration	416
Fleet Aviation Specialized Operational Training Group	629
Food Service	364, 457
G-1 Personnel	58, 75, 83, 279, 581, 656, 873
G-3 Air Operations	349, 414, 588, 596, 597, 598, 638, 677
G-4 Logistics	29, 31, 32, 33, 34, 35, 38, 248, 251, 375, 742, 744
G-4 Transients	249, 250
G-6 Ground Electronic Maintenance Division	1, 53, 138, 321, 394, 399, 404, 573, 584, 730, 860, 861
G-6 Training	874
G-6/Federal Aviation Administration	372
Guard Safety	523
Headquarters and Headquarters Squadron	1
Headquarters and Headquarters-37	245, 305
Headquarters and Headquarters-38	8, 9, 11, 22, 23, 56
Marine Medium Helicopter Squadron-764	295
Housing	133, 614
Human Resources Office	304

Table 1-4
On-Base Tenant Units
MCAS El Toro BCP - March 1995

Tenant	Building Number(s)
Installation	58, 96, 146, 152, 155, 156, 174, 175, 293, 298, 299, 300, 301, 302, 306, 324, 326, 335, 357, 358, 368, 370, 374, 377, 380, 382, 383, 384, 385, 386, 445, 446, 448, 496, 529, 530, 566, 567, 568, 579, 582, 583, 610, 616, 619, 639, 640, 641, 642, 643, 659, 662, 674, 675, 676, 678, 685, 689, 733, 735, 753, 769, 770, 772, 778, 779, 789, 796, 818, 834, 836, 837, 838, 852, 855, 862, 1595, 1601, 1710
Joint Public Affairs Office	59
Marine Air Control Group-38	328
Marine Air Control Squadron-38	169
Marine Air Federal Credit Union	743
Marine Aircraft Group-11	136, 137, 292, 391, 415, 457, 701, 711, 712, 713, 734, 761, 763, 767, 816, 843, 854, 856, 886, 887, 891, 923
Marine Aircraft Group-46	296
Marine Aviation Logistics Squadron-11	105, 127, 129, 130, 131, 132, 142, 290, 291, 308, 341, 371, 392, 447, 456, 469, 602, 634, 636, 658, 664, 673, 716, 726, 745, 749, 750, 751, 756, 764, 786, 831, 840, 856, 1650, 1651, 1787, 1791
Marine Aviation Logistics Squadron-46	295
Marine Air Support Squadron-6	49
Marine Air Traffic Control Squadron-38 (DETD)	137
Marine Air Traffic Control Squadron-48	47, 49
Marine Corps Combat-3	748
Marine Wing Communications Squadron	5, 13, 14, 15, 16, 17, 21, 56, 600, 844
Marine Wing Headquarters Squadron	7, 12, 19, 20, 48, 52, 275, 787, 832, 1720
MWO-HOSP	355
Morale, Welfare, and Recreation	10, 390, 402, 410, 421, 422, 427, 430, 432, 457, 703, 704, 881, 882, 883, 884, 894
Morale Welfare and Recreation-Hospital	347, 372, 649, 718, 791, 793, 823
Morale Welfare and Recreation-Headquarters	75
Morale Welfare and Recreation-Recreation	75, 94, 264, 272, 280, 459, 460, 464, 578, 601, 607, 615, 625, 626, 679, 680, 681, 686, 687, 736, 782, 788, 790, 792, 817, 828, 830, 859, 885, 922, 924, 925, 1775, 1798
Morale Welfare and Recreation-Retail	77, 637, 649, 650, 651, 722, 783, 799, 1702
Morale Welfare and Recreation-Support	77, 285
Marine Wing Support Group-37	309, 758, 762, 771
Marine Wing Support Squadron	51
Marine Wing Support Squadron-371	765
Marine Wing Support Squadron-373	25, 26, 28, 307, 313, 671, 672, 800, 801, 802, 803, 804, 825, 875
Marine Wing Support Squadron-472	50
Naval Aviation Engineering Service Unit	745, 829

Table 1-4 On-Base Tenant Units MCAS El Toro BCP - March 1995	
Tenant	Building Number(s)
Naval Air Maintenance Training Group Detachment	324, 325, 631
Naval Hospital	256, 439, 876
Nuclear Biological Chemical	1655, 1656, 1662, 1719, 1789
NWSSP	292
Provost Marshal's Office	6, 27, 657, 702, 707, 708, 725, 729, 835, 856, 858
PMTC	292
Reserve Support Unit	60
Security	75, 98, 121, 311, 324, 376, 665, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872
Staff Judge Advocate	54, 257
Staff Non-Commissioned Officer Academy	367
Station Operations Maintenance Squadron	2, 3, 4, 99, 288, 289, 307, 372, 435, 586, 587, 594, 595, 624, 644, 645, 646, 647, 717, 721, 824, 877, 878, 879, 880, 1815
Station Operations Maintenance Squadron/ Federal Aviation Administration	372
Station Ordnance	536, 537, 538, 539, 540, 542, 543, 544, 545, 546, 611, 682, 781, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 841, 893, 1752, 1810
Station Training	242, 819
MCAS El Toro	1, 58, 124, 135, 366, 367, 376, 389, 440, 441, 442, 449, 450, 451, 452, 455, 660, 661, 666, 667, 668, 669, 731, 732, 739, 740, 741, 842, 889, 890, 895, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911
Station/Provost Marshal's Office	898
Supply	189, 241, 285, 314, 318, 319, 320, 321, 359, 360, 363, 369, 379, 396, 419, 534, 552, 555, 556, 558, 559, 560, 561, 599, 635, 670, 683, 699, 700, 747, 752, 755, 797, 827, 853, 1538, 1580, 1703
Trainee Management Element-31	324
Training	57, 243, 244, 251, 263, 271, 443, 471, 472, 519, 520, 693, 746, 839
Vacant	115, 122, 123, 135, 163, 164, 166, 167, 170, 171, 172, 296, 307, 322, 688, 697, 709, 710
Vacant (G-4)	240, 276, 277, 297, 310, 445
Vacant (DLA)	176, 177, 178, 179, 180, 181, 182, 183
Vacant (Inst)	222, 373
Vacant (MAG-11)	230, 231, 1804
Vacant (STA)	312, 315
Vacant (Supply)	191, 553, 554
Marine All Weather Attack Squadron 121	454, 462, 714, 728
Marine All Weather Attack Squadron 242	453, 458, 461, 715, 727
Marine All Weather Fighter Attack Squadron 225	124, 125, 126

Table 1-4 On-Base Tenant Units MCAS El Toro BCP - March 1995	
Tenant	Building Number(s)
Marine Fighter Attack Squadron 134	296
Marine Fighter Attack Squadron 225	698
Marine Fighter Attack Squadron 314	118, 119, 120, 605, 695, 892
Marine Fighter Attack Squadron 323	121, 134, 606, 696
Marine Fighter Attack Squadron 352	114
Marine Fighter Attack Training Squadron-101	371, 463, 487, 785, 845, 848, 849
Marine Fighter Attack Squadron - 235	292
Marine Aerial Refueler/transport Squadron-352	297
West Coast Commissary Complex/Defense Commissary Agency	694
Wing Nuclear Biological Chemical	798
Source: MCAS El Toro Building List, 1993	

Table 1-5 Property Acquisition Summary MCAS El Toro BCP - March 1995					
Tract Number (1)	Previous Land Owner	Acreage		Acquisition Date	Type of Acquisition
		Fee Land	Easement Land		
A	Irvine Ranch	2318.833	Not Available	27 October 1942	Acquired from the Irvine Ranch Corporation under the authority of an Act of Congress, approved 27 March 1942
B	Irvine Ranch	21.525	Not Available	01 July 1945	Acquired from the Irvine Ranch Corporation under the authority of an Act of Congress, approved 24 February 1942
C	El Toro Development Company	160.734	Not Available	09 January 1952	Acquired by a Grant Deed from El Toro Development Company
D	The Irvine Company	1403.42	Not Available	13 August 1953	Acquired pursuant to a Declaration of Taking filed with the U.S. District Court for the Southern District of California
E	The Irvine Company	86.95	Not Available	April 1972	Acquired by exchange from The Irvine Company
F	The Irvine Company	729	Not Available	1976	Acquired by exchange from The Irvine Company
G	The Irvine Company	17.74	Not Available	December 1986	Purchase from The Irvine Company
Total Acreage:		4738.202	Not Available		
Note: (1) Tract numbers correspond to Figure 1-4. Sources: MCAS El Toro Master Plan, 1991. Brown and Caldwell, 1986.					

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Table 1-6 Off-Base Properties MCAS El Toro BCP - March 1995					
Description	Acreage	Date of Acquisition	Environmental Status	Location	Remarks
Big Bear Recreation Facility	6.5	1985	Unevaluated	Big Bear, CA	Navy plans to retain facility
Obstruction Lighthouse No. 1 (Building 586)	NA	NA	Unevaluated	Adjacent to east side of Station	Potential for asbestos and lead-based paint
Obstruction Lighthouse No. 3 (Building 588)	NA	NA	Unevaluated	Adjacent to east side of Station	Potential for asbestos and lead-based paint
Obstruction Lighthouse No. 10 (Building 595)	NA	NA	Unevaluated	Adjacent to north side of Station	Potential for asbestos and lead-based paint
Notes: NA - not available Obstruction Lighthouse nos. 2 and 4 - 9 are either located within Station boundaries or have been demolished.					

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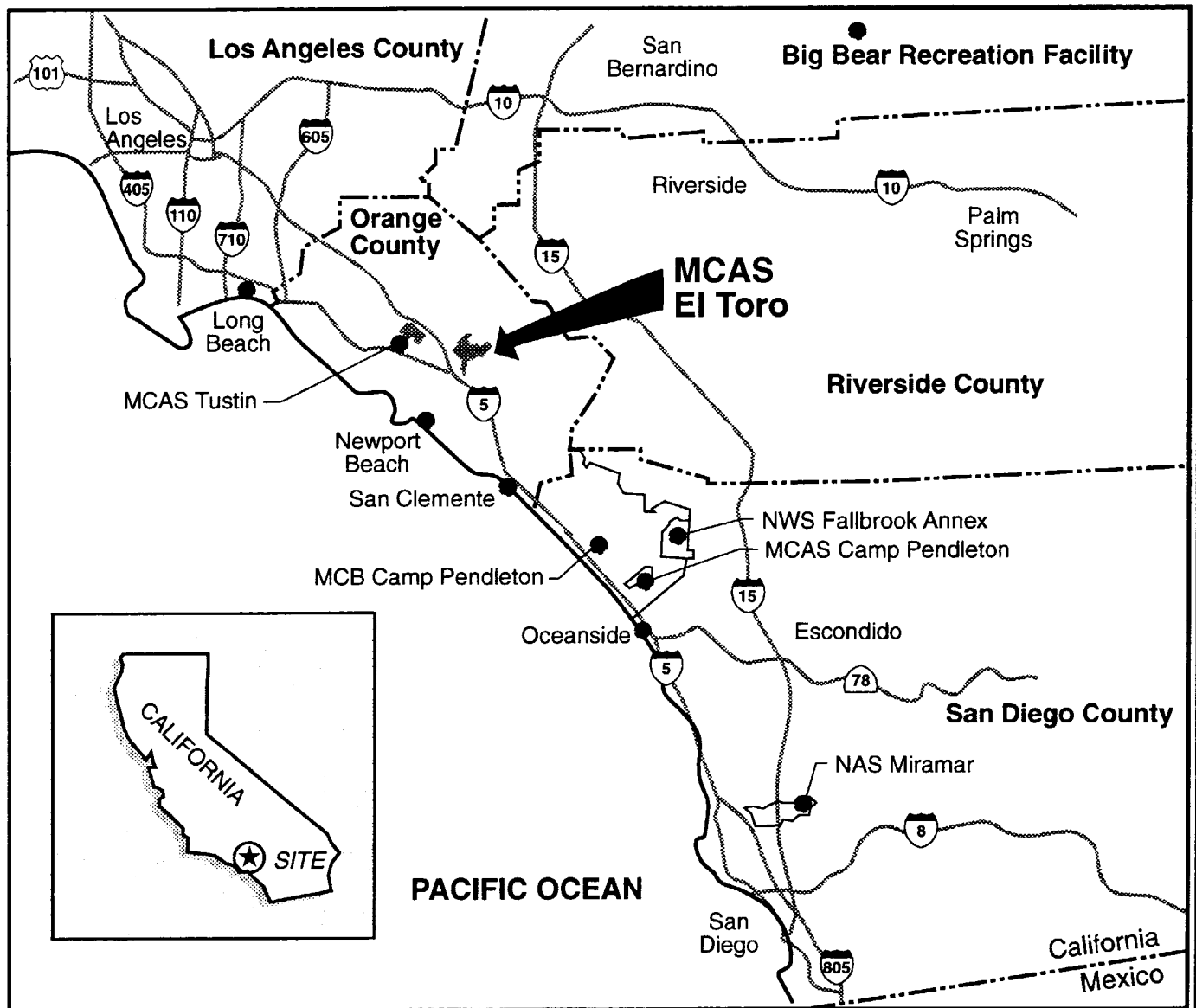
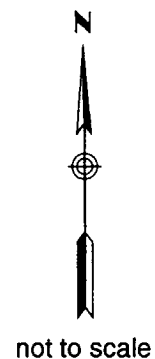
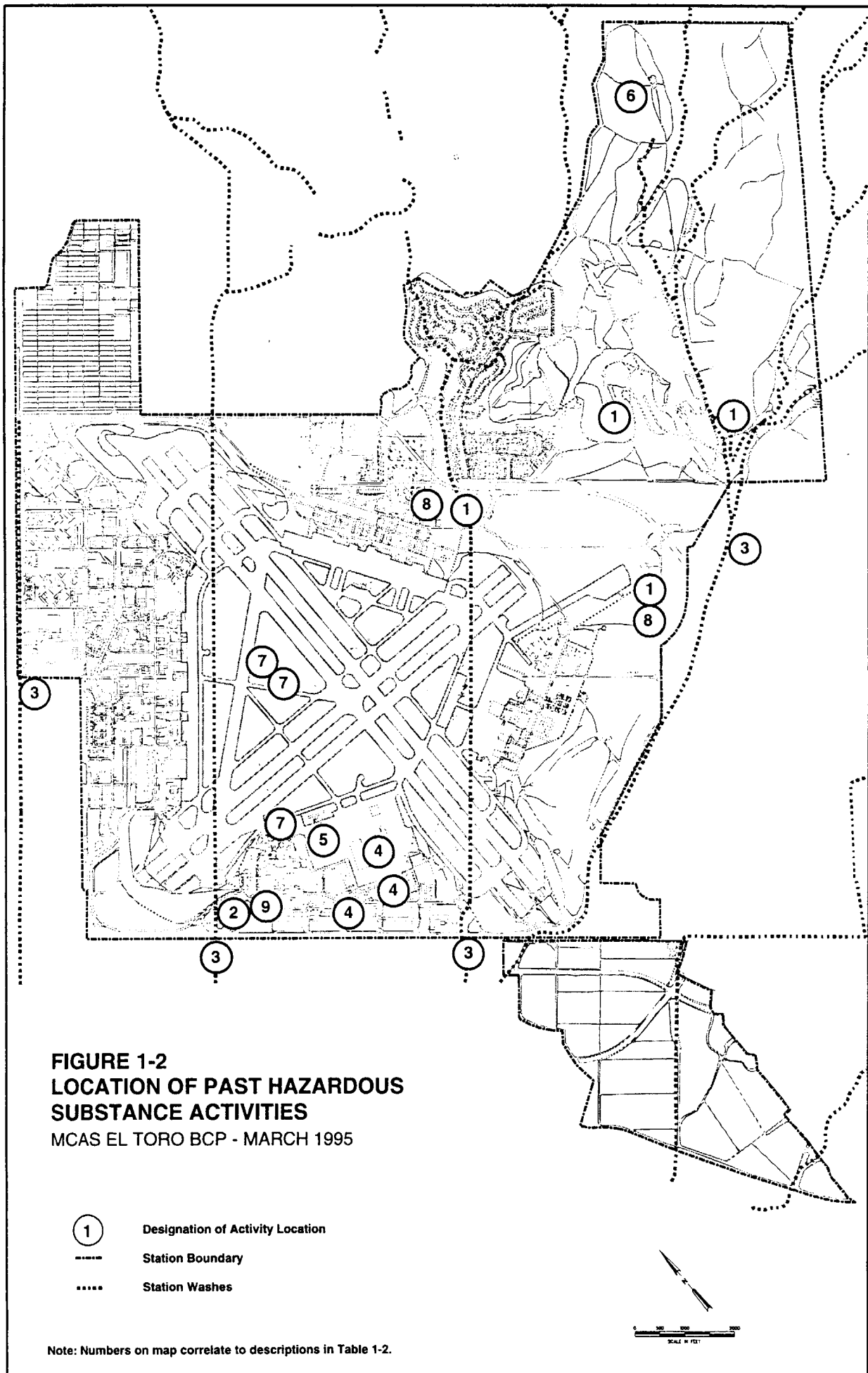
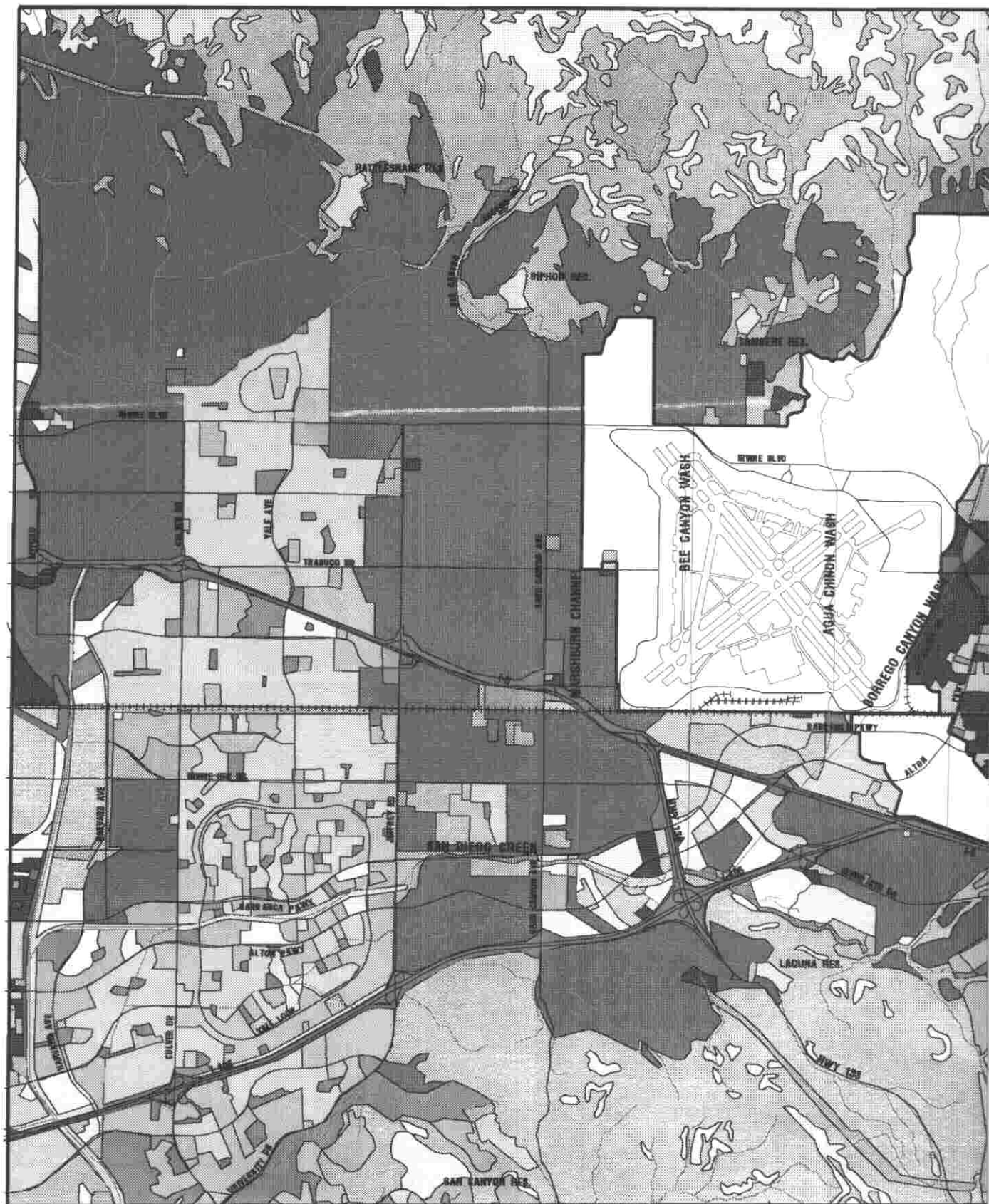


FIGURE 1-1
MCAS EL TORO LOCATION MAP
 MCAS EL TORO BCP - MARCH 1995



Source: MCAS El Toro Master Plan, 1991.







FEATURES:

- RURAL RESIDENTIAL
- SINGLE-FAMILY RESIDENTIAL
- MULTIFAMILY RESIDENTIAL
- MOBILE HOME/TRAILER PARK
- MIXED RESIDENTIAL
- REGIONAL SHOPPING COMPLEX
- COMMERCIAL STRIP
- GENERAL COMMERCIAL
- COMMERCIAL OFFICE
- COMMERCIAL RECREATION
- GENERAL INDUSTRY
- PETROLEUM REFINING/PROCESSING
- TRANSPORTATION FACILITY
- COMMUNICATION FACILITY
- UTILITY
- WATER
- MILITARY
- EXTRACTION
- AGRICULTURE
- FLOOD PLAIN
- PUBLIC AND INSTITUTIONAL
- OPEN SPACE/RECREATION
- VACANT/UNDEVELOPED (LT 30%)
- VACANT/UNDEVELOPED (GT 30%)
- VACANT W/ IMPROVEMENTS
- ROAD
- RAILROAD
- AIRFIELD
- STREAM

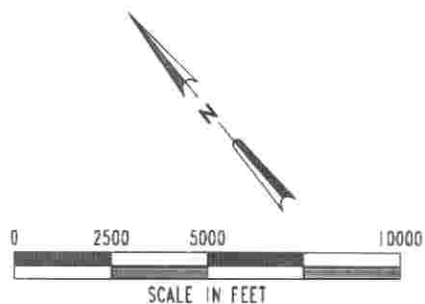
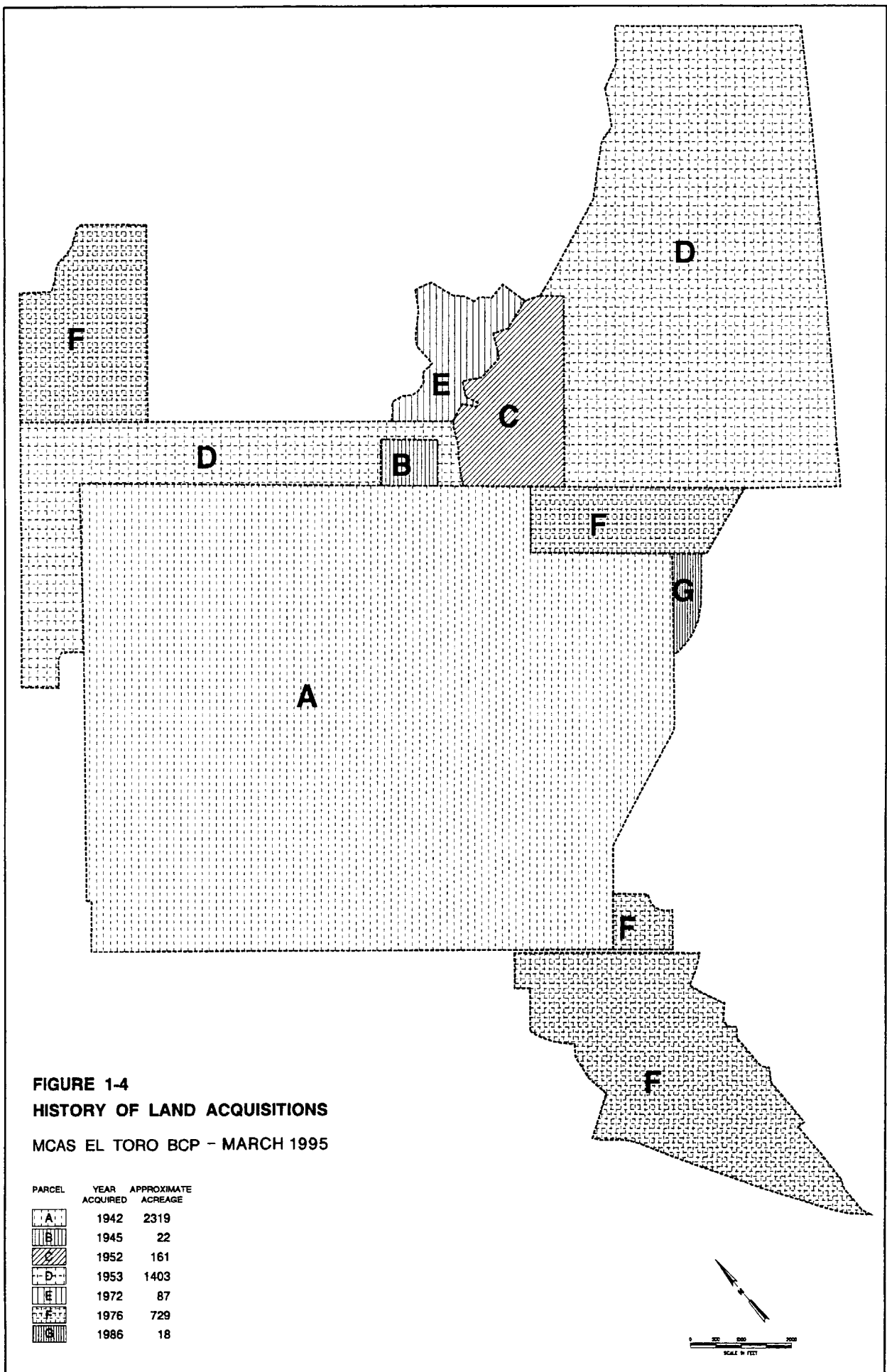
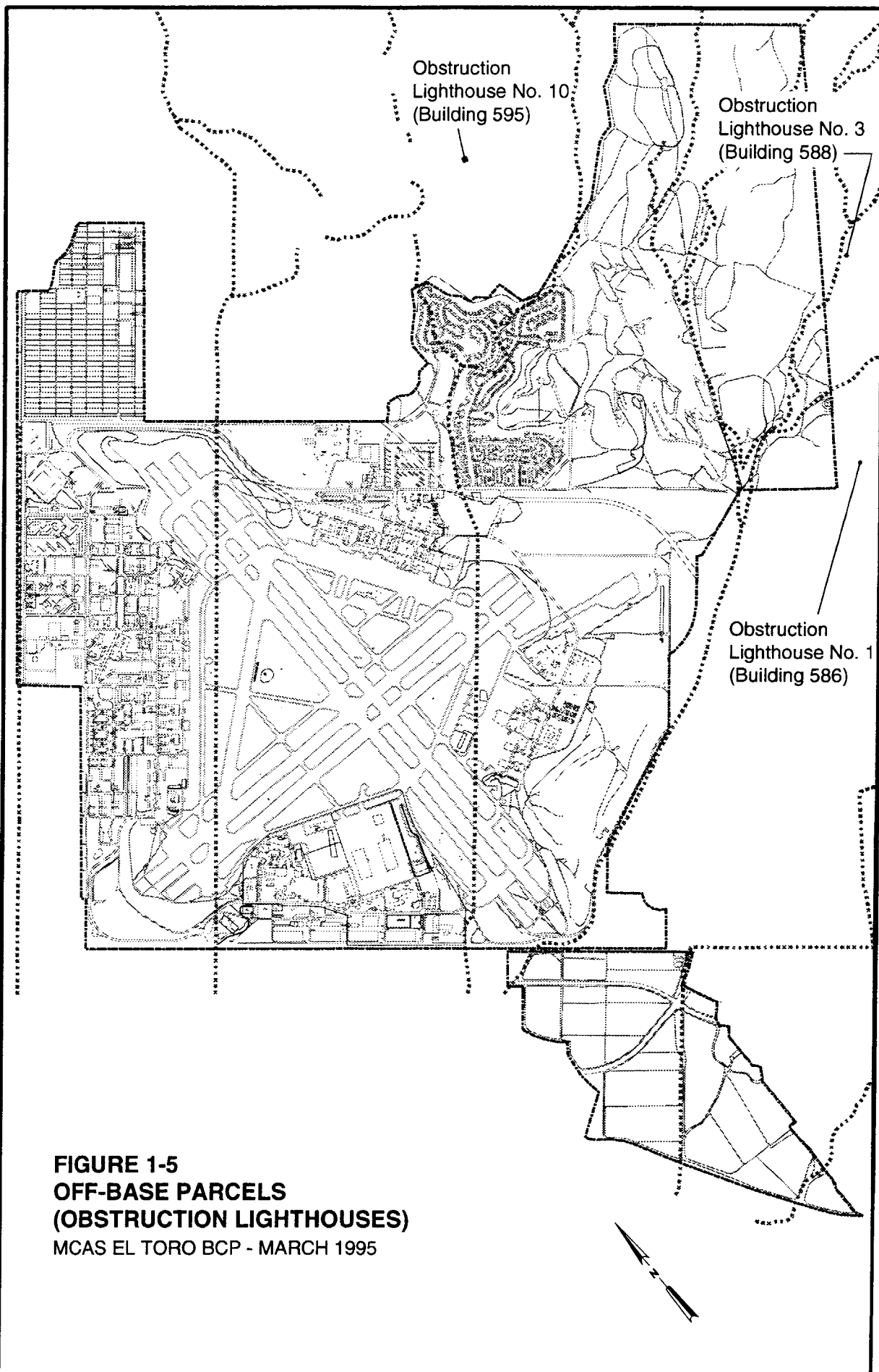


FIGURE 1-3
EXISTING OFF-BASE LAND USE
 MCAS EL TORO BCP - MARCH 1995





Chapter 2

Property Disposal and Reuse Plan

This chapter describes the status and strategy for real property disposal efforts at MCAS El Toro. The relationship between environmental cleanup efforts and property disposal efforts is also addressed.

2.1 STATUS OF DISPOSAL PLANNING PROCESS

The County of Orange (County) along with the cities of Irvine and Lake Forest formed the El Toro Reuse Planning Authority (ETRPA) and began deliberations in March 1994. In 21 January 1995, however, the County withdrew from the ETRPA to pursue formation of a new reuse committee as mandated by Measure A, which was approved in the November 1994 elections. Measure A requires that the County General Plan be amended to have 2,000 acres at the Station zoned for commercial airport use. Currently, resolution of the new reuse committee is not finalized. Although formation of a recognized reuse committee has not been completed, the following documents related to reuse are still being prepared for MCAS El Toro:

Aviation Feasibility Study. The County, at ETRPA's request, obtained an Airport Improvement Program grant from the Federal Aviation Administration (FAA) for preparation of a feasibility study of potential civilian aviation use(s) of MCAS El Toro. The feasibility study is being conducted in two phases. Phase 1 focuses on developing a baseline inventory and aviation demand analysis necessary to identify the key issues and parameters within which the local reuse committee will identify potential civilian aviation alternatives for more detailed study in

Phase 2. Phase 2 will focus on the descriptions and analyses of the local reuse committee-selected alternatives.

Community Reuse Plan. The purpose of the Community Reuse Plan is to indicate the County's preference for the use of parcels available from MCAS El Toro. Any planned roadways or widening of roads will also be presented in this document. On 02 September 1994, the Community Reuse Plan was partially funded by DOD through the Office of Economic Adjustment (OEA) and contracted by the County for completion by February 1996.

Disposal of MCAS El Toro land for reuse will be conducted in accordance with the Base Realignment and Closure Act of 1990 (BRAC), the Pryor amendment to the National Defense Authorization Act, and the Base Closure Community Redevelopment and Homeless Assistance Act of 1994. In accordance with the National Environmental Policy Act (NEPA), DON will issue a Disposal and Reuse Record of Decision (D&R ROD) on the basis of an Environmental Impact Statement (EIS) prepared for the Station.

On 26 October 1994, President Clinton signed into law the Base Closure Community Redevelopment and Homeless Assistance Act of 1994, which has significantly changed the BRAC process. Under this law, BRAC actions are removed from the McKinney Act with the requirement that they be addressed in the planning process of the local redevelopment authority. The other major aspect of this law affects the screening process. While the DOD and federal screening process will continue much as they have in the past, state, local, and American

Indian screening will now be the responsibility of the local redevelopment agency.

As part of the BRAC process, DON has been conducting required DOD and federal screening of available properties at MCAS El Toro identified in the 1993 closure actions. The following agencies have submitted requests for MCAS El Toro property:

- o Air National Guard
- o Department of Interior
- o Department of Justice/Bureau of Prisons
- o Federal Aviation Administration
- o Immigration and Naturalization Service
- o Marine Corps Exchange

None of the requested transfer actions for DOD or federal agencies has been approved by the Assistant Secretary of the Navy as of 31 December 1994. Parcel recipients and disposal methods cannot be finalized until the reuse plan is finalized and the D&R ROD is issued. State and local screening has not occurred.

Pursuant to the Base Closure Community Redevelopment and Homeless Assistance Act, the County will be required to submit a letter requesting that MCAS El Toro be included under the provisions set forth by this act. A draft land disposal plan will be prepared in accordance with the aforementioned laws and regulations. The planning effort will include defining the parcels designated for reuse. Final definition of the reuse parcels will be conducted by the County under the direction of the reuse committee. Parcel recipients and

disposal methods cannot be finalized until a D&R ROD is issued and a reuse plan is completed.

As mandated by the Community Environmental Response Facilitation Act (CERFA), a base-wide EBS is being prepared for MCAS El Toro. One of the main objectives of the EBS is to evaluate the environmental condition of the property and identify parcels that are potentially eligible for disposal under CERFA provisions. Information compiled in the Final EBS (planned for completion by 01 April 1995) will be used to refine the BCP map (Figure 3-4 in Chapter 3) illustrating the environmental condition of MCAS El Toro property.

A draft version of the MCAS El Toro EBS Report (Jacobs, 1994a) was submitted to EPA and Cal-EPA on 11 November 1994. The Draft EBS Report identifies 20 parcels (approximately 2,500 acres) at the Station as being potentially uncontaminated under CERFA. In December 1994, confirmation sampling was performed at 12 of the 20 parcels to evaluate residual levels of pesticides and herbicides in shallow soil. The sampling results have been provided to EPA and Cal-EPA as supporting information for their review of the Draft EBS Report. The CERFA-eligible parcels are still under review by EPA and Cal-EPA. Concurrence from EPA and Cal-EPA on CERFA parcels identified in the EBS is anticipated in late March 1995. The Final EBS will be submitted to Navy Headquarters by 01 April 1995.

In addition to identifying CERFA-eligible parcels, information from the EBS will be used to support finding of suitability to transfer (FOST) or finding of suitability to lease (FOSL). Because identification of CERFA parcels has not yet been finalized, activities for FOST or FOSL have not

been initiated. The regulatory agencies will be involved in the development of FOST and FOSL documentation. It is anticipated that the FOST or FOSL activities will start in 1997, at which time the following documents should be completed:

- o Installation-wide EBS
- o Site-specific EBSs, as required
- o Environmental Impact Statement (EIS)
- o D&R ROD
- o Community Reuse Plan

In the absence of a reuse plan for the Station, reuse parcels have been identified according to the Station's existing land use map presented in the MCAS El Toro Master Plan (MCAS El Toro, 1991). For simplification of parcel boundaries and reduction of the number of parcels, the grouping of similar land uses (e.g., housing and community support) was done in some instances. The parcel boundaries were also set up so that no buildings are split and the various locations of concern (LOCs) are typically contained within a single parcel.

As shown in Figure 2-1 (Potential Disposal and Reuse Parcels Based on Existing Land Use), the primary existing land use at the Station is the airfield operation (designated as parcels 5A through 5D). A description of the parcels is provided in Table 2-1 (Reuse Parcel Data Summary).

2.2 RELATIONSHIP TO ENVIRONMENTAL PROGRAMS

The transfer of MCAS El Toro property may be to other federal agencies or nonfederal parties. Transfers of federal property to

nonfederal parties are governed by CERCLA 120(h)(3)(B)(1), as amended by CERFA in 1992. However, property transfers between federal agencies are exempt from covenants requiring environmental response action, CERCLA 120(h).

Execution of federal property transfer to non-federal parties is dependent on the environmental condition of the subject property. In the case of contaminated land, the DON remains responsible for conducting any remedial or corrective action necessary to protect human health and the environment with respect to any hazardous substances or petroleum products that were present on such real property at the time of transfer. Remedial and removal actions must be selected and implemented before disposing of property to private parties, the state, or local government.

The property may be transferred by deed provided that the deed contains a covenant stating that remedial actions necessary to protect human health and the environment with respect to any hazardous substances remaining on the property "have been taken" before the date of such transfer. CERFA amended CERCLA Section 120(h)(3) by clarifying that remedial action "has been taken" if the construction and installation of an approved remedial design have been completed, and the remedy has been demonstrated to the EPA Administrator's satisfaction to be operating properly and successfully. It further states that carrying out extended pump-and-treat or long-term operation and maintenance does not preclude the transfer of property if the remedy has been demonstrated to be operating properly and successfully.

Notwithstanding the preceding paragraphs, Section 2908 of the National Defense Authorization Act for Fiscal Year 1994 authorizes the Secretary of Defense to enter into agreements to transfer contaminated property to any person who agrees to perform all environmental restoration, waste management, and environmental compliance activities that are required for the property under federal and state laws, administrative decisions, agreements (including schedules and milestones), and concurrences. This section does not modify or alter the provisions of CERCLA. Therefore, the property will have to be in the condition required by CERCLA before the deed is executed on behalf of the United States. No such agreement to transfer may be entered into until the Secretary of Defense, in consultation with the EPA Administrator, has prescribed implementing regulations.

CERFA mandates expeditious transfer of uncontaminated land at federal installations undergoing closure or realignment. DOD policy on CERFA implementation defines "uncontaminated" land as "any real property on which no hazardous substances and no petroleum products or their derivatives, including aviation fuel and motor oil, were stored for 1 year or more, or known to have been released or disposed of."

The overall cleanup strategy for MCAS El Toro will incorporate the information from the environmental restoration program into the disposal and reuse process. A summary of the known locations of environmental concern identified within each reuse parcel is presented in Table 3-1 (refer to Chapter 3).

2.3 PROPERTY DISPOSAL METHODS

A discussion of the various methods that will be considered for disposal of MCAS El Toro property is presented below.

2.3.1 Federal Transfer of Property

Several federal agencies have submitted requests for MCAS El Toro property. To date, none of the requested land transfers has been approved by the Assistant Secretary of the Navy. Upon approval, the DON will commence transfer proceedings of the subject property(ies) to the sponsoring service via Form 1334, Request for Property Transfer process. This will include an appraisal of the subject property and a funds transfer from the receiving service to the DON. In lieu of this monetary compensation, required environmental cleanup can be considered. Infrastructure support for these facilities will transfer to the County. It will be incumbent on the receiving agency to negotiate with the County for services.

2.3.2 No-Cost Public Benefit Conveyance

To date, no public benefit conveyances have been granted.

2.3.3 Negotiated Sale

Properties not conveyed via the public benefit conveyance method, or those not identified for economic development conveyance to the reuse committee, will be disposed of in accordance with established regulations. These properties may be purchased by public agencies

through negotiated purchase based on fair market value. Property acquired through negotiated purchase may be used or resold without deed restrictions, depending on the environmental condition of the property. Negotiated sales permit the local reuse committee to control the ultimate disposal of MCAS El Toro property without the uncertainty of the public bid process.

2.3.4 Widening of Public Highways

Currently, two public highway expansion projects are being performed that will result in transfer of MCAS El Toro property. These projects are described below:

Bake Parkway/Interstate 5 Project. Construction of the Bake Parkway/Interstate 5 intersection is currently underway. This construction project is located at the south end of MCAS El Toro at the edge of the southern flight corridor. The project is currently under construction and is scheduled to be completed in 1996. The County and the DON have entered into an agreement permitting the transfer by quitclaim deed of the Bake Parkway/Interstate 5 right-of-way to Caltrans at fair market value. The DON issued a license for construction of the road pending completion of the transfer documentation.

Alton Parkway Extension Project. Currently, Alton Parkway, which runs near the southeast side of the Station, ends at Irvine Boulevard. The County plans to extend Alton Parkway across Irvine Boulevard toward the northeast. This extension will occur on Station property near IRP Site 2. The roadway extension will also result in a severed

parcel of Station property to the east. The County and the DON have entered into an agreement permitting transfer by quitclaim deed of the Alton Parkway right-of-way and severed parcel at fair market value. The severed parcel may be sold by the DON at a later date to another party or direct to the County.

2.3.5 Donated Property

There are currently no plans to donate any MCAS El Toro real property.

2.3.6 Interim Leases

Operational closure of MCAS El Toro is not scheduled until July 1999. As of February 1995, numerous interim leases exist at the Station, as listed in Table 2-2 (Existing Legal Agreements/Interim Leases). Additional interim leases prior to operational closure of the Station will be considered on a case-by-case basis. No interim leases will be considered favorably if the result would impede current military operations. Certain leases prior to, or after, operational closure of MCAS El Toro may be appropriate and compatible with a Community Reuse Plan. Such leases may help defray the costs for the DON.

2.3.7 Competitive Public Sales

If MCAS El Toro property is not transferred via the public conveyance or negotiated sales processes, the federal government may elect to dispose of the property via a competitive public sale. These sales would be conducted in accordance with the established federal regulations and would utilize land use designations provided by the

Chapter 2

Property Disposal and Reuse Plan

reuse committee. This information would be included in the announcement of sale.

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Table 2-1 Reuse Parcel Data Summary MCAS EI Toro BCP - March 1995							
Parcel	Acres	Priority	Parcel Description/ Proposed Reuse	Known Sites	Projected Transfer Date	Transfer Mechanism	Recipient
1A	55.2	TBD	Supply/storage, admin., maintenance / TBD	IRP-13,14; 49 other LOCs	TBD	TBD	TBD
1B	96.9	TBD	Com. support, housing / TBD	IRP-20 93 other LOCs	TBD	TBD	TBD
1C	38.5	TBD	Admin., recreation, housing, training / TBD	35 LOCs	TBD	TBD	TBD
1D	110.07	TBD	Housing, com. support, maintenance, recreation, admin. / TBD	IRP-15; 57 other LOCs	TBD	TBD	TBD
1E	2.6	TBD	Northern flight corridor (agriculture) / TBD	None	TBD	TBD	TBD
1F	55.5	TBD	Recreation / TBD	5 LOCs	TBD	TBD	TBD
1G	106.8	TBD	Housing, com. support, training / TBD	41 LOCs	TBD	TBD	TBD
2A	139.6	TBD	Airfield operations, supply/storage, maintenance, training / TBD	IRP-3, 4; 80 Other LOCs	TBD	TBD	TBD
2B	110.7	TBD	Com. support, housing, school district, supply/storage / TBD	33 LOCs	TBD	TBD	TBD
2C	241.9	TBD	Housing, open land / TBD	18 LOCs	TBD	TBD	TBD
2D	7.4	TBD	Supply/storage (Tank Farm 555) / TBD	8 LOCs	TBD	TBD	TBD
2E	33.3	TBD	Northern flight corridor (agriculture) / TBD	None	TBD	TBD	TBD
2F	644.3	TBD	EOD Range, open land / TBD	IRP-1; 1 Other LOC	TBD	TBD	TBD
3A	67.8	TBD	Maintenance, admin., supply/storage, training / TBD	46 LOCs	TBD	TBD	TBD
3B	60.8	TBD	Ordnance, supply/storage / TBD	IRP-5; 4 Other LOCs	TBD	TBD	TBD
3C	20.4	TBD	Agriculture / TBD	1 LOC	TBD	TBD	TBD
3D	8.8	TBD	Agriculture / TBD	None	TBD	TBD	TBD
3E	17.2	TBD	Agriculture / TBD	None	TBD	TBD	TBD
3F	178.6	TBD	Golf Course / TBD	17 LOCs	TBD	TBD	TBD
3G	27.7	TBD	Southern flight corridor (agriculture) / TBD	None	TBD	TBD	TBD
3H	6.5	TBD	Southern flight corridor (agriculture) / TBD	None	TBD	TBD	TBD

Table 2-1
Reuse Parcel Data Summary
MCAS EI Toro BCP - March 1995

Parcel	Acres	Priority	Parcel Description/ Proposed Reuse	Known Sites	Projected Transfer Date	Transfer Mechanism	Recipient
3I	1.7	TBD	Southern flight corridor (agriculture) / TBD	None	TBD	TBD	TBD
4A	74.5	TBD	Maintenance, admin., training, com. support / TBD	IRP-24 (1); 84 Other LOCs	TBD	TBD	TBD
4B	89.3	TBD	Supply/storage, maintenance / TBD	IRP-12, 24 (1); 33 Other LOCs	TBD	TBD	TBD
4C	0.8	TBD	Southern flight corridor (agriculture) / TBD	None	TBD	TBD	TBD
4D	6	TBD	Southern flight corridor (agriculture) / TBD	None	TBD	TBD	TBD
4E	7	TBD	Southern flight corridor (agriculture) / TBD	None	TBD	TBD	TBD
5A	1548.6	TBD	Runways and airfield operations / TBD	IRP-6, 7, 8, 9, 10, 11, 16, 19, 21, 22, 24 (1); 123 other LOCs	TBD	TBD	TBD
5B	168.2	TBD	Northern flight corridor (agriculture) / TBD	None	TBD	TBD	TBD
5C	431.7	TBD	Eastern flight corridor (agriculture and open land) / TBD	IRP-2, 17; 2 other LOCs	TBD	TBD	TBD
5D	369.4	TBD	Southern flight corridor (agriculture) / TBD	None	TBD	TBD	TBD

Notes:

TBD = to be determined

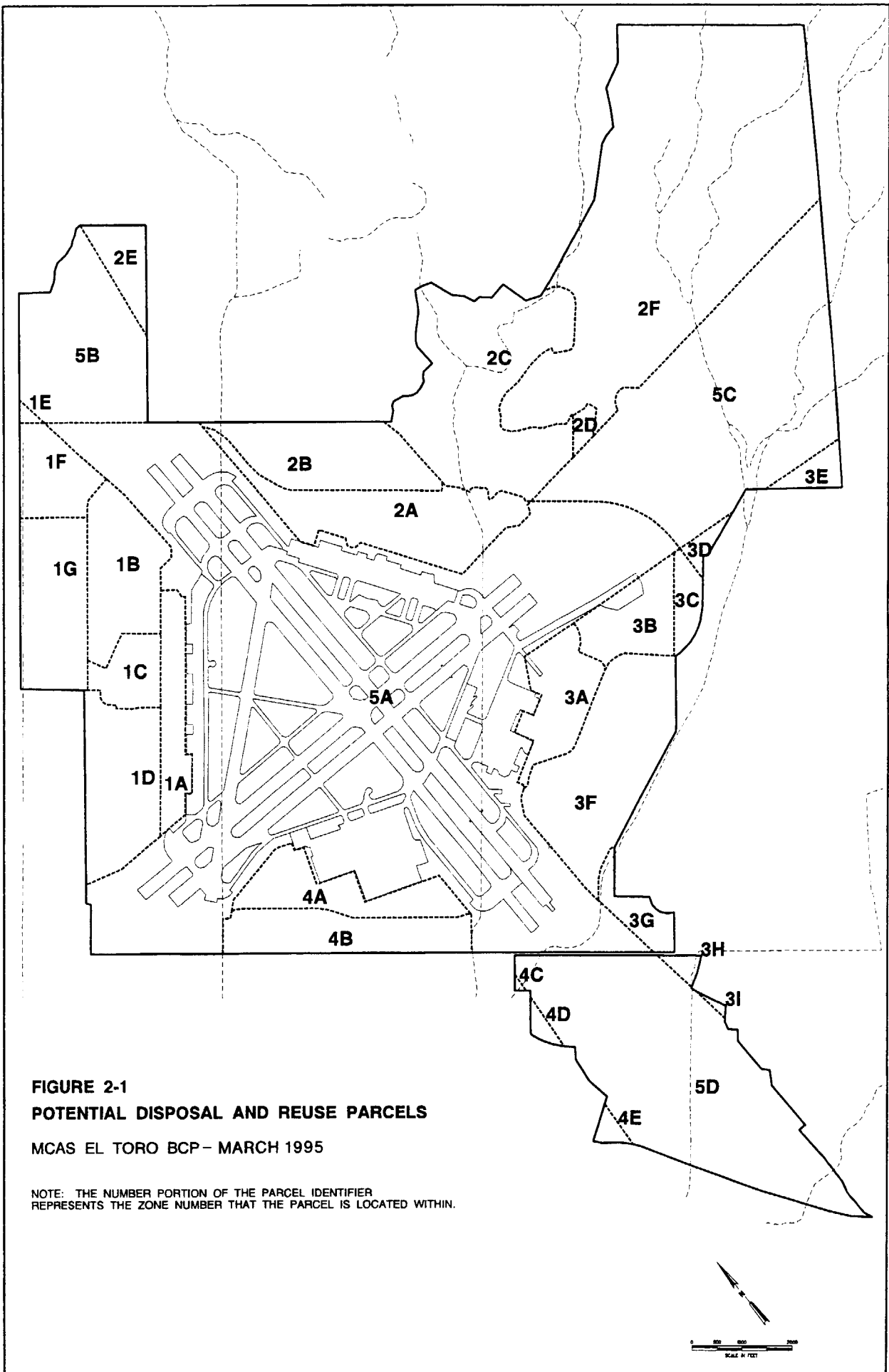
(1) Site 24 (Possible VOC Source Area) traverses three parcels (i.e., 4A, 4B, and 5A).

Table 2-2 Existing Legal Agreements/Interim Leases MCAS El Toro - March 1995				
Title of Interim Lease/ Legal Agreement	Building No./Areas	Date of Agreement	Parcel	Type of Outgrant
Alton Business Association	Landscaping & Maintenance Cont. No. N6871192RP02Q18	1988 to 30 JUN 97	NA	License
Bordiers Nursery	Agricultural Lease/205.52 Acres Cont. No. N6871103RP02021	Expires 31 OCT 97	NA	Agricultural Lease
Boy Scouts	Scout Activities/Bldg 38 Cont. No. N6871192RP02Q25	1987 to 31 JUL 95	NA	License
Boy Scouts	Scout Activities Cont. No. N6247487RP00Q70	1987 to 31 JUL 95	NA	Licence
Civil Air Patrol	Admin Off., Training & Support Fac. Bldg 328/Pend Avail of Bldg 38 Cont. No. N6871193RP03P84	1991 to 31 MAR 95	NA	License
El Toro Marine Corps Federal Credit Union	Credit Union/0.91 Acres Bldg 743 Cont. No. N6071193RP03P21	Expires 30 APR 97	NA	Lease
El Toro MCAS Civilian Credit Union	Credit Union/1500 SF Bldg. 304 Cont. No. N6247490RP00Q09	1990 to 30 JUN 95	NA	License
Federal Aviation Administration (FAA)	Moving Target Indicator/ Runway 7R-25L Cont. No. N6871190RP00P87	1990 to Unknown	NA	Lease
FAA	Moving Target Indicator/ Runways 16L&34R Cont. No. N6871190RP00Q02	1990 to 19 MAY 95	NA	License
FAA	Control Tower Cont. No. N6871191RP00P68	1991 to 29 FEB 96	NA	License
FAA & Department of Transportation	Air Traffic Control/ 0.33 acres at Bldg 372 Cont No. N6071191RP00P11	1991 to 27 AUG 95	NA	Agreement
The Irvine Company	Easement/1.32 acres Cont. No. N6247479RP00P91	1979 onward. No expiration date	NA	Agreement
The Irvine Company	Storm Drain/ 0.09 Acres Cont. No. N6247479RP00P92	1979 onward. Perpetual Easement	NA	Easement
The Irvine Company	Underground Elec. Line 0.52 Acres Cont No. N6247479RP00P93	1979 onward. Perpetual Easement	NA	Easement
The Irvine Company	Irrigation Water Pipeline 2.06 Acres Cont. No. N6247479RP00P95	1979 onward. Perpetual Easement	NA	Easement
The Irvine Company	Construct Slopes/1.32 Acres Cont. No. N6247479RP00P96	1979 onward. Perpetual Easement	NA	Easement
The Irvine Company	Easement/86.44 Acres	1983 to Indefinite	NA	Easement

Table 2-2 Existing Legal Agreements/Interim Leases MCAS El Toro - March 1995				
Title of Interim Lease/ Legal Agreement	Building No./Areas	Date of Agreement	Parcel	Type of Outgrant
The Irvine Company	Barranca Pkway Cont. No. N6247483RP00P77	NA	NA	Easement
The Irvine Company	Flood Control Improvements Cont. No. N6871192RP02Q17	Expires 14 SEP 95	NA	Licence
The Irvine Company	56 ft Access Road Project No. SW90 - 085	16 APR 92	NA	Easement
Irvine Industrial Research/Developmt	Landscape & Maintenance Cont. No. N6871192RP00P13	1992 to 30 AUG 96	NA	License
Irvine Ranch Water District	Water Transmission Line Cont. No. NP (R) - 32778	Perpetual Easement	NA	Easement
Irvine Ranch Water District	For Reservoir Cont. No. N6871192RP02P82	17 APR 93	NA	License
Irvine Ranch Water District	Enlarge Flow Control Facility Cont. No. N6247481RP00P20	25 FEB 93	NA	Easement
Irvine Ranch Water District	Water Pipeline/0.20 Acres Cont. No. N6247479RP09025	1979 onward. Perpetual Easement	NA	Easement
Irvine Ranch Water District	Water Transmission Line Cont. No. NF(R) 1483	NA	NA	Lease
Irvine Unified School District	School Site/10.73 Acres Cont. No. N6871191RP00P96	1991 to 30 JUN 96	NA	Lease
Los Alisos & El Toro Water Districts	Water Transmission Main 3.78 Acres Cont. No. NOY (R) - 59550	Permanent Easement	NA	Easement
Magarro Farms	Agricultural Lease/421 Acres Cont. No. N6247489RP00Q14	1989 to Unknown	NA	Agricultural Lease
Not Known	Sale of severed parcels 1801 and 1802 (Alton Pkway) SW92 - 116	9 JUL 92	NA	Major Disposal
Orange County	Bake Pkway/Interstate 5 Expansion 25 Acres	9 JUL 92	NA	Major Disposal
Orange County	Right of Way	1987 to Indefinite	NA	Easement
Orange County	Easement - Irvine Blvd. Cont. No. N6247488RP00T05	1988 to Indefinite	NA	Easement
Orange County	Interim Road/3.06 Acres Cont. No. NOY (R) - 56107	Temporary	NA	Easement
Orange County	Water Pipeline/0.34 Acres Cont. No. NOY (R) - 69386	Permanent Easement	NA	Easement
Orange County	Road - Irvine Blvd. Cont. No. N6871192RP00P19	NA	NA	Easement
Orange County	Sale to Orange Co. for Alton Pkway (Congressional) SW92 - 041	9 JUL 92	NA	Major Disposal

Table 2-2 Existing Legal Agreements/Interim Leases MCAS El Toro - March 1995				
Title of Interim Lease/ Legal Agreement	Building No./Areas	Date of Agreement	Parcel	Type of Outgrant
Orange County Environmental Management Group	Traffic Signal at G-2/ Vehicle Detector Loop Cont. No. N6871193RP03Q08	31 JUL 93 to 31 JUL 96	NA	License
Orange County Water District	Construction and O & M of Wells and Pipelines related to Treatment of Groundwater (Desalter Project)	1992 to Indefinite	NA	Easement
Orange County Flood Control	Flood Control Channel/2.87 Acres Cont. No. N6247479RP00P94	1979 onward. Perpetual Easement	NA	Easement
Orange County Water District	Water Pipeline/8.89 Acres Cont. No. N6247481RP00P20	1981 onward. Perpetual Easement	NA	Easement
Pacific Tel.	Underground Telephone Line 0.19 Acres NOY (R) - 64721	Expires 13 JUN 2013	NA	Easement
SD Pipeline Co.	Petrol Transmission Pipeline Cont. No. NOY (R) - 67877	Expires 29 MAR 2013	NA	Easement
Sea Tree Nurseries	Access & Storage Cont. No. N6247489RP00Q15	1989 to Unknown	NA	License
Southern California Edison (SCE)	Water Pipeline/0.01 Acres Cont. No. N6247482RP00P09	1982 to 15 OCT 2025	NA	Easement
SCE	Electrical Dist. Cont. No. N6247482RP00Q60	1982 to 11 JUN 2032	NA	Easement
SCE	Electrical Dist. Lines 0.032 Acres Cont. No. N6871191RP00P67	1991 to 14 MAY 96	NA	License
SCE	Fuse/Switch Slab Box Cont. No. N68711912RP00P85	1991 to 1 JUN 96	NA	License
SCE	Relocate Utility Cont. No. NOY (R) - 65723	Indefinite Agreement	NA	Agreement
Southern California Gas Company	Gas Pipeline/0.11 Acres Cont. No. NOY (R) - 62897	Expires 27 JUN 2012	NA	Easement
Young Marine Organization	Space for Weekend Use Cont. No. N6871192RP02Q23	30 JUN 92 to 30 JUN 95	NA	License
Young Marine Organization	Space for Weekend Use Cont. No. N6247487RP00Q65	Expires 30 JUN 95	NA	License
Notes: NA - Not Available Source: MCAS El Toro Outgrant & Ingrant Listing as of 30 September 1991. MCAS El Toro Installations Department Database Records, 6 January 1994.				

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Chapter 3

Installation-Wide Environmental Program Status

This chapter provides a summary of the current status of environmental restoration activities, installation-wide source discovery and assessment activities, and ongoing compliance activities at MCAS El Toro. Based on this information, an evaluation of the environmental condition of Station property is presented. A master database summarizing locations of potential environmental concern (referred to as LOCs) at the Station is provided in Table 3-1a (Site Summary Table). Additional information on these locations is presented in issue-specific text and tables in this section. The status of community involvement with environmental restoration activities is also presented in this section.

3.1 ENVIRONMENTAL PROGRAM STATUS

The following subsections provide a description and status of the IRP activities at MCAS El Toro.

3.1.1 Restoration Sites

In June 1988, EPA recommended listing MCAS El Toro on the National Priorities List (NPL) of the Superfund Program under CERCLA. The listing was predicated on the presence of VOC contamination in the groundwater at the Station boundary and the detection of VOCs in the agricultural wells to the west. MCAS El Toro was placed on the NPL in February 1990.

In October 1990, EPA, DTSC, the Regional Water Quality Control Board (RWQCB), and the DON signed an FFA to conduct an RI/FS for MCAS El Toro following the NCP and EPA Guidance. Under the FFA, the DON

is the lead agency; EPA and Cal-EPA, which includes both the DTSC and the RWQCB, perform oversight roles.

The IRP being conducted at MCAS El Toro is currently in the Phase II investigation. A total of 22 sites were evaluated during the Phase I investigation, which was completed in May 1993. Site 23 (Wastewater Treatment Plant Sewer Lines) was evaluated in the Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) performed at the Station. The sewer lines were recommended for no further action in the RFA. The sewer lines are located in a newly identified site, Site 24 (Potential VOC Source Area), which encompasses most of the southwest quadrant of the Station. This area was evaluated with a soil gas survey in mid-1994 and will be further evaluated in the Phase II RI.

A draft version of the Work Plan for the Phase II RI was submitted in November 1993 (Jacobs, 1993b). Two new sites, Sites 24 (Possible VOC Source Area) and 25 (Major Drainages), were established for investigation in Phase II. Because Site 23 is excluded from the IRP, the total number of IRP sites is 24.

Table 3-1a includes the 24 IRP sites and provides a brief description of the sites. The site locations are shown in Figure 3-1 (Sites, Zones, and OUs Currently Under Investigation). The locations and extent of the IRP sites shown in this figure are based on site boundaries identified in the Draft Phase II RI Work Plan (Jacobs, 1993b). Figure 3-1 also shows the location and extent of groundwater contamination plumes that are or may be associated with the IRP sites. These contaminant plumes include:

- o Main chlorinated VOC plume in the southwest quadrant (Site 18)
- o Chlorinated VOC plume at Site 2
- o Petroleum hydrocarbon plume near Sites 13 and 15
- o Petroleum hydrocarbon plume near Site 3

The plumes shown in Figure 3-1 are contoured to the appropriate maximum contaminant levels (MCLs). The plumes represent composites of contaminant contours. That is, overlapping plumes have been mapped as a single plume. The plume delineations are based on the IRP second round of groundwater quality monitoring, June 1993 - December 1993.

The IRP sites have been grouped into three main operable units (OUs). In December 1994, two of the OUs were subdivided by the parties to the FFA. The latest OU definitions are described below:

- o OU-1 addresses groundwater on- and off-Station that is contaminated with constituents that have migrated from sites at MCAS El Toro.
- o OU-2 consists of the potential source areas of VOC groundwater contamination. OU-2 has been subdivided as follows:
 - OU-2A addresses the sites that are believed to be contributing to the VOC plume emanating from the southwest portion of the Station. OU-2A includes Site 24 (Potential VOC Source Area) and Site 25 (Major Drainages).

- OU-2B addresses two of the Station landfills, Site 2 (Magazine Road Landfill) and Site 17 (Communication Station Landfill), that, based on Phase I RI data, require full investigation and groundwater monitoring. These sites will likely have a presumptive remedy (e.g., capping) applied, provided that ecological receptors are not significantly affected.
- OU-2C includes two of the Station landfills, Site 3 (Original Landfill) and Site 5 (Perimeter Road Landfill), that will undergo further groundwater monitoring to confirm that groundwater is not being impacted.
- o OU-3 sites include those IRP sites not addressed in the other OUs. The sites were primarily established under the IRP prior to the listing of MCAS El Toro on the NPL, and do not necessarily relate to the regional VOC contamination in groundwater. There are currently 16 sites classified in the main OU-3. OU-3 has been subdivided as follows:
 - OU-3A includes the following 15 sites:
 - o Site 1 (Explosive Ordnance Disposal Range)
 - o Site 6 (Drop Tank Drainage Area No. 1)
 - o Site 7 (Drop Tank Drainage Area No. 2)
 - o Site 8 (DRMO Storage Area)
 - o Site 9 (Crash Crew Pit No. 1)
 - o Site 10 (Petroleum Disposal Area)
 - o Site 11 (Transformer Storage Area)

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- o Site 12 (Sludge Drying Beds)
 - o Site 14 (Battery Acid Disposal Area)
 - o Site 15 (Suspended Fuel Storage Tanks)
 - o Site 16 (Crash Crew Pit No. 2)
 - o Site 19 (Aircraft Expeditionary Refueling [ACER] Site)
 - o Site 20 (Hobby Shop)
 - o Site 21 (Materials Management Group, Building 320)
 - o Site 22 (Tactical Air Fuel Dispensing System [TAFDS])
- OU-3B includes two sites, Site 4 (Ferrocene Spill Area) and Site 13 (Oil Change Area), that are scheduled for early actions.

As new data become available, the OU definitions may be re-evaluated and refined. The OU definitions can be modified at any time by agreement among the parties to the FFA.

Schedules for investigation and remediation of IRP sites at MCAS El Toro are specified in the FFA. Currently, the schedules for OU-2C and OU-3A are being negotiated by the parties to the FFA. Resolution of the schedules for these OUs is anticipated in 1995. A summary of the current schedules for the OUs, except OU-2C and OU-3A, is presented below (detailed schedules for the OUs are provided in Section 5.0):

- o The FS for OU-1A is currently being prepared by the CLEAN I contractor. The Station is evaluating plans to enter into an agreement with the OCWD on the dual-purpose Irvine Desalter Project (IDP), which is intended to capture and treat contaminated groundwater and provide a local source of potable water.

Remediation is planned to consist of extraction wells and treatment system (installed as part of the IDP), to pump groundwater and remove solvent contamination believed to be emanating primarily from the southwest quadrant of the Station. Extraction wells have been proposed or installed at the southwest perimeter of the Station and in the southwest quadrant of the Station. The FFA specifies that the ROD for OU-1 be completed by the end of 1995 (29 December 1995). The documents leading up to completion of the ROD for OU-1 include the following:

- Interim Action Feasibility Study (IAFS) - August 1995
 - Draft Proposed Plan - November 1995
- o For OU-2A and OU-2B, the Draft Phase II RI Work Plan is scheduled to be submitted in March 1995, with fieldwork beginning in mid-1995. The Draft Phase II RI Reports for OU-2A and OU-2B are scheduled for completion in late 1995 and early 1996, respectively. RODs for these OUs are scheduled to be completed by mid-1997.
- o OU-3B (i.e., Sites 4 and 13) will not be included in the Phase II RI. For these sites, Draft Engineering Evaluations/Cost Analyses (EE/CAs) for removal actions are scheduled to be issued in April 1995. Action memoranda for the sites are scheduled to be issued in the first half of 1996, with Final EE/CAs scheduled to be completed by mid-1996.

To date, one early action item has been completed for the IRP sites (refer to Table 3-3 [Early Action Status]). A brief description of the completed early action is provided below:

- o A soil gas investigation (field activities) at Sites 24 (Potential VOC Source Area) and 25 (Major Drainages) was completed in June 1994. The primary objective of the investigation was to locate potential shallow subsurface source(s) of VOC groundwater contamination. Potential VOC source areas investigated included IRP sites, RFA sites, and other significant features identified through records searches and interviews. A total of 18 potential halogenated hydrocarbon source areas and five potential aromatic hydrocarbon/total petroleum hydrocarbon (TPH) source areas were identified during the investigation. Fourteen of the eighteen halogenated hydrocarbon source areas and four of the five aromatic hydrocarbon/TPH source areas were recommended for further action to evaluate the extent of contamination. These source areas at Sites 24 and 25 will be further investigated in the Phase II RI.

Additional potential early actions identified for IRP sites are discussed in Subsection 4.1.4. Table 3-3 (Early Action Status) will be revised in updates of this BCP as early actions for IRP sites are implemented or completed.

3.1.2 Installation-Wide Source Discovery and Assessment Status

An EBS for MCAS El Toro is currently being prepared. The draft version the EBS was completed on 11 November 1994 (Jacobs,

1994a); the final version is scheduled for completion by 01 April 1995. One of the main objectives of the EBS is to evaluate the environmental condition of property at the Station to facilitate property disposal. Available information from this ongoing study related to source discovery and assessment includes the following:

Aerial Photograph Features/Anomalies. In 1993, a survey of historic aerial photographs of MCAS El Toro was performed by Science Applications International Corporation (SAIC) (SAIC, 1993). The survey included photographs dating back to 1946. The photographs were reviewed for features/anomalies of potential environmental concern. Over 500 features/anomalies were identified by SAIC. The features/anomalies related to IRP sites were evaluated and incorporated, if appropriate, in the Phase II RI Work Plan. As part of the EBS, the remaining aerial photograph features/anomalies were evaluated. The Draft EBS Report identified a total of 53 features/anomalies as features of potential environmental concern for further evaluation. Table 3-1b provides descriptions of the features/anomalies recommended for further evaluation. These features/anomalies are shown in Figure 3-1.

Features of Potential Environmental Concern Identified in Personnel Interviews. Interviews with current and former MCAS El Toro personnel were conducted on 26 May 1994. The interviewers included Station personnel, staff from SWDIV, the CLEAN I contractor, Cal-EPA representatives, and EPA's consultant. The purpose of these interviews was to obtain additional information regarding past hazardous substance management practices, activities, and releases at

the Station. As a result of the interviews, the following two additional features of potential environmental concern were identified:

- A former landfill area was identified near Station family housing. During grading activities for housing construction in the early 1980s, the area located between Building 722, Connor Avenue, and Chosen Drive was filled with general construction refuse to stop water from collecting. Hazardous wastes are not known to have been disposed of in this fill area. Additional evaluation of this area is needed.
- An additional landfill area was identified at the Perimeter Road Landfill. According to the interview panel, landfilling occurred in an area south of the current boundaries identified for the Perimeter Road Landfill (IRP Site 5). Hazardous wastes are not known to have been disposed in this extension of the landfill. Additional evaluation of this area is needed.

These locations of potential environmental concern are shown in Figure 3-1.

During preparation of the Draft EBS Report, a former Station employee reported that mercury leaks occurred at the two elevated water towers formerly located in the northwest portion of the Station. The former locations of these towers are shown in Figure 3-1. The towers had mercury water level gauges near the ground surface. According to the former Station employee, these gauges leaked small quantities of mercury onto the unpaved ground surface at the base of the towers. These towers were constructed in 1943 (Building 222, east tower) and

1953 (Building 373, west tower); they were demolished in 1992. These locations should be further evaluated for evidence of mercury releases.

3.2 COMPLIANCE PROGRAM STATUS

The following sections provide a summary of the status of compliance programs at MCAS El Toro. The status of mission/operational-related compliance program activities is summarized in Table 3-4 (Mission/Operational-Related Compliance Projects). Currently, no closure-related compliance projects or early actions related to compliance have been undertaken at the Station. As such activities are undertaken, Tables 3-5 (Closure-Related Compliance Projects) and 3-6 (Compliance Early Action Status) will be revised for updates of the BCP.

3.2.1 Storage Tanks

Storage tanks, including underground storage tanks (USTs) and aboveground storage tanks (ASTs), are addressed in the following subsections. Also included is a discussion of the fuel distribution systems (fuel pipelines) at the Station.

Underground Storage Tanks. A total of 406 USTs have been identified at MCAS El Toro. This total includes 83 active, 161 inactive, 158 removed or abandoned tanks, and 4 tanks with an unknown status. A comprehensive inventory of MCAS El Toro USTs is provided in Table 3-7 (Underground Storage Tank Inventory). This table includes available information on tank characteristics, compliance actions, known releases, and sampling results, if applicable.

The UST locations are plotted on a series of figures. Figure 3-2a (Key to UST Location Maps) delineates the sections of the Station encompassed by four area-specific maps. Figure 3-2b shows the northwest quadrant of the Station, Figure 3-2c shows the northeast quadrant of the Station, Figure 3-2d shows the southeast quadrant of the Station, and Figure 3-2e shows the southwest quadrant of the Station. These area-specific maps include all known UST locations at the Station. The UST locations are based on available information, including Station maps, UST surveys, UST removal drawings, RFA site visits, and interviews with Station personnel. Information on the locations for some of the USTs was unavailable. In these cases, the UST location maps show the UST in the center of the nearest building.

Figures 3-2b through 3-2e also indicate the environmental condition of the UST locations based on available soil sampling information. Three categories are identified:

- o Above California Leaking Underground Fuel Tank (LUFT) Levels - These include UST locations with soil sample results greater than LUFT levels. To date, 61 UST locations have been identified above LUFT levels at the Station.
- o Below LUFT Levels - UST locations where the tank has been removed and soil sample analytical results are below detection limits. To date, 58 UST locations have been identified with sample data below LUFT limits.
- o Unevaluated or Additional Investigation Required - A total of 287 UST locations at the Station are unevaluated or require further

evaluation. This category includes USTs that (1) have not been evaluated, (2) have analytical results pending, or (3) have analytical results above detection limits but below LUFT values and are under review by the agencies.

Compliance issues for USTs are managed by the MCAS El Toro Environmental Office (EO). Operation and maintenance activities for USTs are the responsibility of the Station's AC/S Installations Department. Information on USTs was obtained from the Station's UST Inventory Database. These data were supplemented with information obtained from the RFA performed at the Station and other UST reports prepared for the Station. While significant information is presented in Table 3-7 for MCAS El Toro's USTs, some additional information and verification of current information will be needed.

The Orange County Health Care Agency (OCHCA), Environmental Health Division regulates USTs in Orange County and is the lead agency for UST compliance for the Station. OCHCA requires that UST monitoring systems be installed at all USTs on-Station before a Permit to Operate USTs is issued to the Station.

The Station is currently in the process of installing UST monitoring systems at UST sites on-Station. A Draft UST Monitoring Plan for the Station was prepared under the CLEAN I Program (Contract No. N68711-89D-9296) in February 1993. The plan called for vadose zone monitoring at 32 USTs and monitoring using a quantitative release detection method at 25 USTs. There are five USTs on-Station (Tank Farm 555) for which current monitoring technologies do not exist. These tanks are 567,000 gallons in size and store JP-5. Some testing

of soil gas at these tanks was conducted in November 1993. During these tests, elevated petroleum levels were measured. The Station is working with OCHCA to develop appropriate monitoring techniques for these tanks. After all the monitoring systems have been installed, it is anticipated that a Permit to Operate USTs will be issued to the Station.

One UST location at the Station (Tank 398) has been the subject of extensive investigations being performed under the CLEAN I Program (CTO No. 0150). This UST site is located in the northeast quadrant of the Station, approximately 1,500 feet northwest of Tank Farm 6. Tank 398 has been removed and replaced with USTs 902A, 902B, and 902C. Field investigations have identified JP-5, as well as benzene, toluene, ethylbenzene, and xylenes (BTEX), in groundwater in the vicinity of this location. The extent of the contaminant plume is shown in Figure 3-1. This plume represents a composite of contaminant contours (contours correspond to MCLs) based on a 1993 investigative report (Jacobs, 1993e). The work plan for remedial actions to be conducted at Tank 398 is currently being reviewed by the local regulatory agencies. This work plan describes the design, construction, operation, and maintenance of a free product removal system planned for installation. Currently, it is anticipated that construction of the system will begin in mid-1995. It is expected that operation, and maintenance of the system will be required for a 12-month period. If required, the service contract allows for an extension beyond 12 months.

Petroleum hydrocarbon plumes in groundwater have been identified in two other areas at the Station. In the northeast quadrant of the Station, elevated petroleum hydrocarbon levels have been found in

groundwater downgradient of Tank Farms 5 and 6. In the northwest quadrant of the Station, elevated petroleum hydrocarbons have been found in wells located side-gradient and downgradient of Tank Farm 2. Other potential sources of these contaminants include IRP Site 3 (plume near Tank Farms 5 and 6) and IRP Sites 13 and 15 (plume near Tank Farm 2). These tank farms are planned to be investigated as potential sources of the benzene detected in groundwater in these two areas. The locations of these tank farms (and IRP Sites) are shown in Figure 3-2c.

The Station has formed a UST Tiger Team to address UST issues. Members of the Tiger Team include representatives from the Station's Environmental Office, Engineering Department, BRAC Office, and SWDIV. Some of the goals and objectives of the Tiger Team include the following:

- o Develop strategies for UST management with respect to compliance
- o Prioritize UST removals
- o Develop plans for eventual closure of all USTs
- o Update and maintain the UST inventory database presented in Table 3-7

The Tiger Team will meet on a regular basis to assess the status of the UST program with respect to compliance and base closure issues. The Tiger Team has identified 70 inactive USTs to be removed in 1995 and

is currently developing a strategy to remove the remaining inactive USTs in 1996. It is expected that removal activities will begin in mid-1995. In addition, the Tiger Team is developing a scope of work for necessary remedial actions at various former UST sites.

In the March 1994 version of the BCP, it was recommended that information presented in Table 3-7 should be verified for accuracy. As such, some activities conducted for this updated version of the BCP included a supplemental UST evaluation. The purpose of this evaluation was to verify UST information presented in Table 3-7. Activities conducted included the following:

- o Review of Station records and as-built drawings
- o Interviews with Station personnel and OCHCA representatives

Information obtained from the above activities was used to update Table 3-7 and Figures 3-2b through 3-2e.

A Work Plan is currently being developed to assess tank removal sampling results for 43 former UST locations at the Station and to provide recommendations for closure or further action (i.e., additional investigation and/or remedial action). In this plan, the tanks were preliminarily divided into the following three categories:

- o Immediate Closure Recommended - Contamination was not detected in soil samples collected during removal activities at 10 former UST locations. These USTs are recommended for immediate closure.

- o Limited Investigation Required - Additional investigation is recommended at 20 former tank locations to assess the extent of contamination detected during removal activities.
- o Remedial Action Required - Remedial actions will be conducted at 13 former tank locations to clean up contamination that was detected during the removal activities.

The draft work plan is currently being reviewed by SWDIV. It is anticipated that work will begin in early April 1995.

Aboveground Storage Tanks. There are currently 14 ASTs identified at MCAS El Toro. An inventory of ASTs at the Station is provided in Table 3-8 (Aboveground Storage Tank Inventory). Compliance issues for ASTs are managed by the MCAS El Toro EO. Operation and maintenance activities for ASTs are the responsibility of the Station's AC/S Installations Department.

The RWQCB regulates ASTs storing petroleum products under the state's 1990 Aboveground Petroleum Storage Act, amended in 1991. The law requires aboveground petroleum storage tank facilities with a single tank capacity of greater than 660 gallons or a cumulative capacity of greater than 1,320 gallons to (1) file a storage statement, (2) take action to prevent spills, and (3) monitor groundwater if necessary. To date, the Station has not filed AST storage statements with the RWQCB.

Fuel Supply Pipelines. Fuel supply facilities at MCAS El Toro are the responsibility of the Station Supply Department. JP-5 is received at

MCAS El Toro via pipeline from an off-Station source and is distributed at the Station through a series of underground pipelines. The layout of the fuel supply pipelines is shown in Figures 3-2c and 3-2d.

JP-5 is supplied to MCAS El Toro via a 12-inch-diameter pipeline from Norwalk, California. The pipeline enters the Station from the northwest and supplies JP-5 to USTs in Tank Farm 555 located in the northeast portion of the Station. Tank Farm 555 supplies fuel through two steel pipelines (12- and 8-inch diameters) to Tank Farm 5. In the past, Tank Farm 5 supplied fuel to UST 398, which has been removed and replaced with three USTs (902A, 902B, and 902C). These tanks supply four direct refuelers (Buildings 574, 575, 576, and 577).

A 6-inch-diameter carbon steel fuel line is tied into one of the pipelines that extends from Tank Farm 555 to Tank Farm 5. This 6-inch pipeline supplies JP-5 to two 2-day, 30,000-gallon USTs (414A and 414B) located in the southeast quadrant of the Station. From these USTs, the fuel is pumped to two high speed refueling lanes located in the same area.

3.2.2 Hazardous Materials/Waste Management

Hazardous wastes generated at MCAS El Toro are accumulated in containers at tenant-managed less than 90-day accumulation areas (accumulation areas). A total of 89 past and current accumulation areas have been identified on-Station. Of these, 44 accumulation areas are currently in operation at the Station. A list of these accumulation areas is provided in Table 3-9 (Less Than 90-Day Accumulation Area Inventory). Many of these accumulation areas were investigated during

the RFA performed at the Station during 1991 to 1993 (refer to Subsection 3.2.7). Accumulation areas at the Station are managed in accordance with all applicable federal, state, and local environmental laws and regulations.

Hazardous wastes are generated by various on-Station tenants. The tenants are responsible for day-to-day management of the accumulation areas; the MCAS El Toro EO oversees the tenants' operation at the accumulation areas. It is Station policy to store hazardous wastes at the accumulation areas for no longer than 45 days after the accumulation date indicated on the storage containers. Prior to 45 days after the accumulation date, wastes at the accumulation areas are managed according to waste type as described below:

Waste Oil. Waste oil is stored in 55-gallon drums at the tenant accumulation areas. The drums are transferred to Building 326, located in the southwest quadrant of the Station, for pick-up by a recycling contractor. The contractor transports the waste oil off-Station to be recycled. Some Station tenants generate large amounts of waste oil. In these cases, the recycling contractor picks up the waste oil directly at the tenant accumulation areas.

Waste JP-5. Waste jet fuel is stored in 55-gallon drums at the tenant accumulation areas. The AC/S Installations Department pump truck is used to collect the waste fuel and transfer it to an aboveground storage tank (number 862), located in the southwest quadrant of the Station. Accumulation dates are recorded at the tank. A recycling contractor picks up the waste fuel from the tank within 90 days of the oldest accumulation date. The JP-5 is recycled off-Station.

Miscellaneous Hazardous Wastes. Various other hazardous wastes are transferred to the Station's EO less than 90-day accumulation area located at Building 900. Defense Reutilization Marketing Organization (DRMO) is responsible for arranging for the wastes to be transferred off-Station within 90 days of the accumulation date.

Onsite visual inspections at the majority of the Station's accumulation areas are currently being performed by the Navy's CLEAN II contractor. The accumulation areas are being inspected for visual evidence of releases. The contractor will develop removal and/or decontamination strategies for each of the accumulation areas. This effort is expected to be completed in 1995.

Solvent cleaning machines manufactured by Safety-Kleen are used at various locations at the Station. Safety-Kleen comes on-Station to replace the solvents in these machines on a regular basis. The waste solvents are transported off-Station by this contractor.

The Station operated a RCRA-permitted storage facility at Building 673-T3 until August 1994. On 21 December 1994, the Station notified DTSC that waste storage at this building had ceased and closure would be performed. On 17 January 1995, DTSC issued a closure extension letter indicating that the closure of the storage facility must be completed by 14 September 1995. The Station has prepared a closure schedule for Building 673-T3 that will bring the former storage facility to closure within the 180-day time limit. The closure schedule is discussed in Subsection 4.2.2.

In addition to the accumulation areas described above, hazardous wastes generated overseas during Desert Storm were temporarily stored on-Station in 1991. From about August to November 1991, wastes including lubricants, adhesives, paints, and cleaning compounds were stored in the southeast portion of the Station, east of DRMO Storage Yard No. 3. The location of this area is shown in Figure 3-1. Because the majority of this area is unpaved, the waste containers were stored on top of plastic sheeting. The wastes were transported off-Station by contractors in 1991. No releases were reported by the Station's EO. This area should be further evaluated.

Pesticides and herbicides have historically been used at the Station to control rodents and weeds. The AC/S Installations Department, Utilities and Maintenance Division, currently maintains a 6 month to 1 year supply of pesticides in Building 753. Pesticides were formerly stored in Building 493. In addition, the golf course has stored pesticides in Building 1687 and, prior to 1959, in the area occupied by Building 464 (Brown and Caldwell, 1986). Buildings 493 and 1687 were both demolished in 1987. The locations of these pesticide storage areas are shown in Figure 3-1. In addition to the pesticide and herbicide application operations that are conducted by Station personnel, a certified pest controller is contracted to control roaches, spiders, ants, and other pests.

3.2.3 Solid Waste Management

The Solid Waste Management Program at MCAS El Toro is handled primarily through contracts with disposal services. Federal Disposal Services (FDS) currently provides the disposal service to both the

operational and housing areas at MCAS El Toro. In addition, FDS provides curbside recycling in the housing areas and has set up several locations on the Station where dumpsters for recyclable can be accessed. FDS provides some small-scale asbestos disposal services for abatement projects performed by MCAS El Toro Maintenance personnel. When asbestos materials are transported, FDS provides the Station with the manifest (The Environment Company, 1992).

Infectious waste generated at the medical and dental clinics is handled by Browning Ferris Industries (BFI). BFI picks up the infectious waste and transports it off-Station for incineration. BFI provides a disposal manifest to the Station for the activity (The Environment Company, 1992). Prior to using BFI for infectious waste disposal, these wastes were trucked from MCAS El Toro to the Naval Station Long Beach, California (Brown and Caldwell, 1986).

3.2.4 Polychlorinated Biphenyls

A PCB Management Plan was developed for MCAS El Toro in April 1994 (SAIC, 1994). It presents applicable federal, state and local requirements, and describes the Station's system for handling and disposing of PCBs in compliance with applicable regulations and Marine Corps policy. PCB-containing equipment at the Station is managed by MCAS El Toro AC/S Installations.

PCBs are regulated under the Toxic Substances Control Act (TSCA) (40 CFR 761). EPA classifies PCB units as follows:

- o 0 to 49 ppm - Non-PCB item

- o 50 to 499 ppm - PCB-contaminated item
- o 500 ppm or greater - PCB item

In addition, California Code of Regulations (CCR) Title 22 classifies PCB-containing liquids removed from equipment as hazardous waste. According to Title 22, liquids with PCB concentrations greater than or equal to 5 milligrams per liter (mg/L) must be disposed of by incineration or treated to a PCB concentration of less than 2 mg/L.

PCB Transformers. In the March 1994 version of the BCP, a total of 109 existing or former PCB transformers locations were identified from past surveys and the Navy-wide PCB database maintained by the Naval Facilities Engineering Services Center (NFESC). Information on these transformers is provided in Table 3-10 (PCB Transformer Inventory). At that time, the BCT believed that the available information for PCB transformers needed verification. To address this concern, a PCB transformer survey was conducted in late 1994. The objectives of the survey included the following:

- o Verify the status of PCB transformers identified in the March 1994 version of the BCP
- o Visually inspect PCB transformer locations for evidence of releases of dielectric fluid
- o Identify and inspect additional PCB transformer locations found during the field survey

Of the 109 transformer locations identified in the 1994 version of the BCP, visual inspections were performed at 96 locations during the field survey; the other 13 transformer locations were not inspected because (1) the associated building had been demolished and no evidence of the former transformer location was found (5 locations), or (2) the location could not be identified in the field after a thorough investigation (8 locations).

Two types of transformers are used at the Station: pad-mounted and pole-mounted. A total of 58 pad-transformer locations were identified and inspected; transformers were present at 50 of these locations. The original PCB transformers have been replaced with non-PCB transformers at all but three of these locations. The three PCB transformers are located in Building 6 (Database Tracking No. PCBT1) and Building 371 (Database Tracking Nos. PCBT56 and PCBT57). A minor release of an oily liquid, possibly dielectric fluid, was observed at one of the transformers in Building 371 (Database Tracking No. PCBT56) and requires further evaluation; the release was limited to the concrete storage pad. No releases were observed at the other 57 pad-mounted transformer locations inspected.

Thirty-eight pole-mounted transformer locations were visited during the survey; transformers were present at 19 of the 38 locations visited. Because these transformers were located at least 20 feet above the ground surface, close inspection of the transformers could not be performed and, therefore, transformer identification numbers could not be verified. A visual inspection of the ground surface at the base of the poles was performed and no evidence of release was observed at the 38 locations.

In addition to the transformer locations discussed above, a total of three additional PCB transformer locations (six transformers) were identified during the field survey. These transformers are located at Buildings 271 (three transformers) and 833 (three transformers). Both locations have placards indicating the presence of PCBs. No evidence of releases was observed at these locations. Information on these transformers is provided in Table 3-10.

One transformer location was investigated in the RFA performed at the Station. A PCB release reportedly occurred from the transformer located on the southern side of Building 457 (Database Tracking No. PCBT74). Identified as Solid Waste Management Unit/Area of Concern (SWMU/AOC) 244, shallow soil samples were collected at this location and PCBs were detected in one out of seven samples. This SWMU/AOC is scheduled for additional field investigation in 1995.

According to EPA Region IX, the presence of operating PCB transformers does not necessarily preclude the transfer of Station property. The EPA only considers PCB transformer locations to be an environmental concern if a release has occurred (personal communication with D. Nurre (EPA, 1995).

Of the 115 PCB transformer locations identified at the Station (i.e., 109 identified in the March 1994 version of the BCP and 6 identified during the field survey), releases are known to have occurred at only 2 PCB transformer locations (Database Tracking Nos. PCBT56 and PCBT74). As previously discussed, transformer PCBT74 was investigated during the RFA and is scheduled for additional sampling. The release at transformer PCBT56 needs to be evaluated to determine if PCBs have

been released. The remaining PCB transformer locations at the Station are not considered to be an environmental concern.

PCB Transformer and Equipment Storage Areas. Four locations at MCAS El Toro have been used in the past as storage areas for inactive PCB-containing transformers and/or equipment. All four storage areas are located in the southwest quadrant of the Station (refer to Figure 3-1).

One former transformer storage area is located southwest of South Marine Way, east of Bee Canyon Wash. This area was investigated as SWMU/AOC 7 in the RFA. This unpaved, fenced 2-acre storage area was established in 1990 or 1991. The storage area was intended to temporarily store transformers until they could be disposed off-Station. Approximately 20 to 30 transformers were stored in this area at the time of the RFA Visual Site Inspection (VSI) in 1991. As part of the RFA, soil samples were collected in the storage area. No transformers are currently stored in this area.

A second transformer storage area is located on the north side of Building 369. Portions of the area are paved. A portion of this storage area is being investigated in the RI/FS. IRP Site 11 (Transformer Storage Area) is a 30-square-foot concrete pad located in the south-central portion of the storage area where leaks from PCB transformers have been documented. Approximately 50 to 75 transformers were stored on this pad during 1968 to 1983 (Jacobs, 1993b). The Site 11 boundaries encompass the storage pad, the unpaved areas bordering and to the north of the pad, and a lined drainage ditch south of the pad along the north side of Building 369.

A third transformer storage area is located adjacent to Tank 175 (water reservoir). This area was constructed in 1991 and consists of a concrete pad with concrete berms. This area is currently used for storage of non-PCB transformers only. However, according to MCAS El Toro Installations Department staff, one PCB-containing transformer was stored in this area for a short time in the past (personal communication, P. Sherwood/MCAS El Toro Installations, February 1994).

A fourth PCB equipment storage area was identified at the equipment and drum storage area located on the north side of Building 324. During a routine site visit to MCAS El Toro, the CLEAN I contractor discovered miscellaneous electronic equipment (e.g., switches, capacitors) being stored in the vicinity of a drum storage area near Building 324. The items were labelled with hazardous waste stickers indicating the contents as PCB-containing. The labels indicated that the items were in the custody of the DRMO. These items have been removed from the storage area and disposed of off-Station by an authorized disposal contractor.

Non-Transformer PCB Items. In 1991, Kennedy/Jenks Consultants conducted a survey of MCAS El Toro for items and equipment that possibly contain PCBs (Kennedy/Jenks Consultants, 1991). The objective of the survey was to identify PCB items/equipment, other than PCB transformers, that are regulated under federal and state regulations. Approximately 400 buildings were surveyed for possible PCB-containing items and equipment. Transformers and fluorescent light fixtures were excluded from this survey. Items containing dielectric fluid suspected of containing PCBs were sampled and

analyzed. The survey identified 54 items suspected of containing PCB insulation or fluid. Twenty-nine of these items contained dielectric fluid and were sampled and analyzed for PCB content. Table 3-11 (Non-Transformer PCB Items) lists these 29 items identified and summarizes the analytical results for these items. Because these 29 items are below 50 ppm, they are classified as non-PCB items and are not required to be removed from service. However, when these 29 items are disposed of, the oil must be manifested as PCB oil.

Ballasts in fluorescent light fixtures made prior to 1980 may contain PCBs. However, a survey of Station buildings for PCB light ballasts is not required to be conducted, nor is one scheduled to be performed as part of base closure.

3.2.5 Asbestos

MCAS El Toro manages asbestos-containing materials (ACM) according to DOD policy established in a letter dated 02 November 1994 (DOD, 1994). The policy requires the Station to manage "ACM in a manner protective of human health and the environment, and to comply with all applicable Federal, State, and local laws and regulations governing ACM."

Prior to property disposal, the Station is required to document all available information concerning ACM. Documented information should include:

- o Reasonably available information on the type, location, and condition of asbestos

- o Any results of testing for asbestos
- o Description of any asbestos control measures taken
- o Any available information on costs or time necessary to remove the remaining ACM
- o Results of a site-specific update of the asbestos inventory performed to revalidate the condition of ACM

Identified ACM will be remediated only if it is not in compliance with applicable laws and regulations, or if it poses a threat to human health at the time of property transfer. In the property transfer process, remediation of ACM is not required for the following scenarios:

- o The building is scheduled for demolition by the transferee.
- o The transfer document prohibits occupation of the buildings prior to its demolition.
- o The transferee assumes responsibility for the management of any ACM in accordance with applicable laws.

A Draft Asbestos Management Plan and a Draft Asbestos Operating Plan were prepared for the Station in January and February 1992, respectively. The objectives of the Asbestos Management Plan include the following:

- o Identify ACM in facility buildings

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- o Assess the hazard potential of identified ACM
- o Establish policies for handling ACM on-Station
- o Define organizational roles and responsibilities of the Asbestos Management Program
- o Ensure that maintenance workers, as well as building occupants, are not exposed to elevated airborne asbestos fiber concentrations as a result of deteriorated ACM or inappropriate work practices.

The goals and objectives of the Asbestos Operating Plan include the following:

- o Establish policies for conducting maintenance activities on or around known ACM
- o Define proper procedures for handling an emergency response to an asbestos hazard
- o Outline policies for remediation activities
- o Detail proper disposal procedures for ACM

These documents are currently being reviewed and updated by the Station's Industrial Hygienist. It is anticipated that these documents will become final in 1995.

Several surveys for ACMs in buildings at MCAS El Toro have been conducted (Ecology and Environment, May and December 1991, and January 1992; and, IT Corporation, March 1989). Based on the Station's P-164 building database, a total of 506 nonresidential buildings are located on-Station. Approximately 54 percent (273 buildings) of these 506 buildings at MCAS El Toro were inspected during the surveys. ACMs were identified in 164 of the buildings; three of these buildings have been demolished, bringing the total number of buildings with identified ACMs to 161. These buildings, along with the results of the surveys, are listed in Table 3-12 (Buildings with Known Asbestos). No ACMs were identified in the other 108 buildings surveyed. Although ACMs were not found in these 108 buildings, an asbestos survey may be performed before remodeling or demolition activities are undertaken.

The Navy Public Works Center (NPWC), San Diego will soon complete a survey of the MCAS El Toro Family Housing and related facilities for asbestos. As part of this survey, family housing units will be tested in accordance with the applicable standards and NAVFAC guidance. Although field sampling has been completed, NPWC is waiting for final sampling results. Preliminary results indicate that asbestos was found in many of the units surveyed; however, none of the ACM is considered to be a threat to human health (Memorandum, T.H. Christensen/Assistant Chief of Staff, Installations, 30 December 1994).

3.2.6 Radon

Radon is a radioactive gas produced by the disintegration of elemental uranium. Uranium, which originates from magma, predominantly

occurs in granitic rock. Radon is an inert gas that readily migrates from bedrock and soil into the groundwater or air. Radon levels in buildings are a function of underlying soils and rock, and building construction and ventilation. Radon may enter structures through basements, openings around pipes, sumps, cracks in floors, furnaces, and vents.

Because radon can readily migrate into groundwater, the levels of radon in groundwater can provide information on levels of radon that could migrate into air. Literature indicates that groundwater in Orange County, California generally has the lowest radon concentrations in the nation at less than 100 picocuries per liter (pCi/L) (Michael, 1990). Therefore, elevated levels of radon would not be expected in buildings at MCAS El Toro.

TSCA requires that radon studies be conducted in federal buildings and that the results be reported to EPA. Navy guidance requires Naval buildings and housing units occupied for over four hours per day to be tested for radon.

In accordance with the Indoor Radon Abatement provisions of Subchapter III of TSCA, the DOD directed the Station to assess radon levels in a representative sample of its buildings. As part of DOD's voluntary approach to reducing radon exposure, the DOD has required that EPA guidelines for residential structures be applied to remedial actions for radon.

In 1991, a radon survey was conducted at MCAS El Toro in response to the Navy Radon Assessment and Mitigation Program (NAVRAMP).

The NAVRAMP program followed EPA guidelines that consider radon levels of 4 pCi/L or less as low risk and requiring no mitigative action.

The radon survey included the Station hospital (Building 431), the child care center (Building 656), and approximately 185 locations in the family housing area. The radon screening results indicated no facilities or housing units sampled exceeded radon levels of 4 pCi/L. Thus, additional testing or mitigation is not required.

Although DOD policy does not require that radon assessment and mitigation be performed prior to transfer of BRAC property, any available and relevant radon assessment data should be included in property transfer documents.

Station building records indicate that radium paint has been used in the past in Building 296. According to a building plan from 1944, a radium paint room was present on the second floor in the northeast corner of Building 296. Aircraft refurbishing operations are known to have occurred in Buildings 296 and 297 for a short period in the 1940s; however, information on waste management associated with radium painting activities is not available. Former station personnel interviewed in 1994 were asked about radium paint usage on-Station, but were not able to provide additional information.

3.2.7 RCRA Facilities (SWMUs)

A RCRA Facility Assessment (RFA) was performed for the Station from 1991 to 1993. The objectives of the RFA were to identify and evaluate SWMUs and other AOCs with respect to the potential for

releases of hazardous wastes to the environment, and to assess the need for further action at the SWMUs/AOCs. An additional objective of the RFA at MCAS El Toro was to identify potential sites for a fourth operable unit (OU-4) for the IRP.

The Final RFA Report was submitted on 16 July 1993. Three hundred seven SWMUs/AOCs were identified at the Station. A comprehensive inventory of the SWMUs/AOCs identified during the RFA is provided in Table 3-13 (Summary of SWMUs/AOCs). Based on the results of the PR and VSI, 140 SWMUs/AOCs were sampled during the RFA Sampling Visit (SV) to determine whether a release had occurred. The analytical results and recommendations for further action for the SWMUs/AOCs sampled are provided in the Final RFA Report (Jacobs, 1993d).

Based on the SV results, 25 SWMUs/AOCs were recommended for further action in the Final RFA Report. Five basic types of further action were recommended for SWMUs/AOCs:

1. **Include SWMU/AOC into a CERCLA program.** Two SWMUs/AOCs were recommended for further action in the RI/FS:
 - o 194 (Former Incinerator)
 - o 300 (Solvent Spill Area)

These two SWMUs/AOCs have been included in the investigation for IRP Site 3.

2. **Evaluate SWMU/AOC in a state program with additional borings.** SWMUs/AOCs with petroleum hydrocarbon contamination only and unknown extent of contamination were recommended for further action in a state program. Seven SWMUs/AOCs fall into this category of further action:

- o 46 (Equipment Storage Yard)
- o 131 (Engine Test Cell)
- o 145 (UST)
- o 173 (OWS)
- o 175 (UST)
- o 176 (UST)
- o 280 (UST)

SWMUs/AOCs with potential shallow contamination (i.e., SWMUs/AOCs with an immobile contaminant such as PCBs or SVOCs present in a 10-foot sample) were recommended for further action in a state program. Three SWMUs/AOCs fall into this category:

- o 39 (Less than 90-day accumulation area)
- o 88 (Less than 90-day accumulation area)
- o 171 (Less than 90-day accumulation area)

3. **Repair cracks in paved area and leave soil in place.** Seven SWMUs/AOCs were recommended for further action in a Navy program to repair cracked concrete to prevent future migration of moderate levels of petroleum hydrocarbons as a Best Management

Practice (BMP) for the Station. These seven SWMUs/AOCs include:

- o 14 (Drop Tank Storage Area)
- o 110 (Vehicle Washrack)
- o 198 (Vehicle Washrack)
- o 201 (Vehicle Washrack)
- o 204 (Vehicle Washrack)
- o 213 (Vehicle Washrack)
- o 260 (AST)

4. **Evaluate UST or OWS in a state program.** Four SWMUs/AOCs with moderate levels of petroleum hydrocarbons adjacent to a tank bottom are recommended for further action (such as a leak test or inspection or removal) to assess whether the tank is releasing petroleum hydrocarbons to the soil. These four SWMUs/AOCs include:

- o 84 (OWS)
- o 151 (OWS)
- o 199 (OWS)
- o 298 (UST)

5. **Excavate shallow, stained soil.** The following two SWMUs/AOCs had stains on an adjacent unpaved area:

- o 26 (Less than 90-day accumulation area)
- o 33 (Less than 90-day accumulation area)

The RFA recommended that the shallow, stained soil at these SMWUs/AOCs be excavated and properly disposed. In addition, it was recommended that the Station no longer store drums outside of the storage areas.

No SWMUs/AOCs were recommended for inclusion into an OU-4.

In a letter dated 17 May 1994, DTSC approved the RFA under the conditions that further investigation (i.e., sampling) be performed at 10 SWMUs/AOCs, 5 of which were already recommended for further investigation in the RFA (i.e., SWMUs/AOCs 39, 46, 88, 131, and 171). The five additional SWMUs/AOCs recommended for further investigation by DTSC include that following:

- o 7 (Transformer Storage Area)
- o 9 (Fuel Bladder East of Agua Chinon Wash)
- o 244 (PCB Spill Area)
- o 260 (Former AST) (RFA recommended further action [e.g., repair cracks in pavement], but not further investigation at this SWMU/AOC)
- o 264 (DRMO Storage Yard #3)

Additional sampling at the 10 SWMUs/AOCs identified by DTSC is planned to be performed by the CLEAN II contractor concurrent with the Phase II RI fieldwork, which is scheduled to begin in mid-1995.

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The results of the sampling will be provided in an addendum to the Final RFA Report, per DTSC direction.

The status of the remaining SWMUs/AOCs recommended for further action in the RFA is as follows:

- o Further investigation at SMWUs/AOCs 194 and 300 will be conducted in the IRP under Site 3.
- o Further investigation at the UST locations (SWMUs/AOCs 145, 175, 176, 280, and 298) is pending; these locations will be addressed under the compliance program for USTs.
- o Further investigation at the OWS locations (SWMUs/AOCs 84, 151, 173, and 199) is pending; these locations will be addressed under the compliance program for OWSs.
- o Repair of cracks in pavement at the vehicle washracks (SWMUs/AOCs 110, 198, 201, 204, and 213) and Drop Tank Storage Area (SWMU/AOC 14) is pending.
- o Removal of stained soil at the less than 90-day storage areas (SWMUs/AOCs 26 and 33) is pending.

Some SWMUs/AOCs not recommended for further action by the RFA have been included in the Station's IRP. In response to agency comments, SWMU/AOC 90 (Former Sewage Treatment Plant) has been included for further investigation in IRP Site 12 (Sludge Drying Beds). IRP Site 25 (Station Washes) will address the four Station washes

identified as SWMUs/AOCs in the RFA (i.e., SWMUs/AOCs 3 [Marshburn Channel], 4 [Bee Canyon Wash], 5 [Borrego Canyon Wash], and 11 [Agua Chinon Wash]).

A soil gas survey for IRP Sites 24 (Possible VOC Source Area) and 25 (Major Drainages) was completed in October 1994. The survey encompassed numerous SWMUs/AOCs located in the southwest quadrant of the Station. Sites 24 and 25 will be further investigated in the Phase II RI.

3.2.8 NPDES Permits

Stormwater runoff from the aircraft runways, parking areas, aircraft and vehicle maintenance areas, washrack areas and fueling areas from the Station is discharged into three washes (e.g., Marshburn Channel, Bee Canyon Wash, and Agua Chinon Wash), which are tributaries of San Diego Creek. Discharges from these washes are addressed by a National Pollution Discharge Elimination System (NPDES) Permit (Order No. 93-16, NPDES No. CA 0106593) issued to the Station by the RWQCB, Santa Ana Region. The Station's EO is responsible for collecting discharge samples that result from significant rainstorm events or other nonstorm water discharge events. The Station is currently in compliance with the NPDES Permit. The permit expires on 01 March 1998.

Discharges to the sanitary sewer at MCAS El Toro are regulated by the County Sanitation Districts of Orange County. The County has issued Industrial Wastewater Discharge Permit No. 14-1-135 to the Station, which specifies effluent limits and monitoring and reporting

requirements. The Station's EO is responsible for quarterly monitoring of wastewater effluent. The permit was issued in April 1993 and is effective through 30 April 1995.

3.2.9 Oil/Water Separators

OWSs are used at various locations at MCAS El Toro for wastewater pretreatment and meeting stormwater discharge requirements. Fifty-seven OWSs are currently located at the Station. This total includes 45 active and 6 inactive OWSs; the status of 6 OWSs is unknown. Nineteen of the OWSs have USTs associated with them. A comprehensive list of the OWSs is provided in Table 3-14 (Oil/Water Separator Inventory).

OWSs are managed by the MCAS El Toro EO and maintained by the Station's Installations Department. Information on OWSs was obtained from the Station's UST Inventory Database and an OWS survey conducted in 1993 (Law/Crandall, 1993). These data were supplemented with information obtained from the RFA performed at the Station and interviews with Station personnel.

Most of the OWSs are underground units. Two OWSs, located at Agua Chinon Wash and Bee Canyon Wash, are constructed aboveground. According to Station personnel, two additional aboveground units are scheduled for construction at the above mentioned washes. Also, a third aboveground unit will be installed at Building 658.

Under federal regulations, treatment units that are part of wastewater systems regulated under the NPDES program or which discharge to a

publicly owned treatment works (POTW) are exempt from hazardous waste permitting regulations. All OWSs at the Station are exempt from federal hazardous waste permitting regulations because the OWSs are used for treatment of wastewater discharge.

Under state regulations, treatment units with specified hazardous waste streams are subject to Permit by Rule (PBR) regulations under the CCR Title 22, Division 4.5. These regulations require facilities having treatment units defined under PBR regulations to notify DTSC. Additional requirements include contingency and closure plans, and certification that releases have not occurred. PBR regulations have been amended under Assembly Bill 1772 to create a multiple-tiered permitting program. Under the tiered system, some treatment units (e.g., OWSs) are conditionally exempt from PBR regulations. The revised PBR regulations became effective in January 1993; notifications to DTSC were due by 1 April 1993.

In 1993, MCAS El Toro notified DTSC of 21 OWSs located at the Station, and on 01 January 1994, DTSC issued a conditional exemption for operation of these units. Table 3-14 indicates the OWSs specified in the conditional exemption. DTSC's authorization to operate continues until the Station provides notification of stoppage of waste treatment and proper closure of the OWSs. The compliance status for the remaining OWSs needs to be confirmed for future updates of the BCP.

The Station's Installations Department is currently in the process of cleaning and repairing OWSs. Some of the repairs include cleaning

and/or replacing butterfly control valves, replacing faulty pumps, and adjusting alarm systems.

Removal and closure requirements for OWSs are described in CCR Title 22. USTs associated with the OWSs have different closure requirements and must be closed under CCR Title 23.

3.2.10 Silver Recovery Units

In addition to the treatment units (i.e., OWSs) discussed in Subsection 3.2.9, two silver recovery units are operated at the Station. Silver recovery units are located at the Station's photograph laboratory (Building 443) and medical clinic (Building 439).

These treatment units are regulated in the same manner as OWSs under PBR regulations. The silver recovery units are included in the conditional exemption issued to the Station by DTSC on 01 January 1994. When the silver recovery units are removed, they must be closed under CCR Title 22.

In 1993, the Station's photograph laboratory was moved from Building 312, located in the southwest portion of the Station, to Building 443 (the conditional exemption lists the photograph laboratory in Building 312). Because silver recovery units were formerly located in Building 312, this location needs to be evaluated for possible releases.

3.2.11 Lead-Based Paint

Navy policy regarding LBP on nonresidential structures is established in a policy letter dated 26 March 1992 (Navy, 1992). This letter outlines policies on the use and control of LBP during maintenance, repair, and construction of new and existing nonresidential structures and facilities. The Navy policy regarding nonresidential structures states that "painted surfaces of all facilities constructed, repaired, and/or maintained prior to 1980 should be assumed to contain lead."

According to Station building records, a total of 450 nonresidential buildings currently located on-Station were constructed prior to 1980. Navy guidance states that these structures should be assumed to contain LBP.

DOD policy regarding LBP for residential structures is addressed in a policy letter dated 2 November 1994 (DOD, 1994). This policy states that LBP will be managed in a "manner protective of human health and the environment, and to comply with all applicable Federal, State, and local laws and regulations." Transfer of Federal property for residential use will be conducted in accordance with the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of P.L. 102-550). Under this provision, the following actions must be taken prior to the transfer of property:

- o Housing constructed after 1960 and before 1978 must be inspected for LBP and LBP hazards. Results of the inspection must be provided to the prospective transferee of the property. These results must identify the presence of LBP and LBP hazards

on a surface-by-surface basis. Abatement of the LBP or LBP hazard is not required. However, the prospective transferee must be provided a lead hazard information pamphlet and the contract for sale or lease must include a lead warning statement.

- o Housing constructed before 1960 must be inspected for LBP and LBP hazards. Results of the inspection must be provided to the prospective transferee of the property. These results must identify the presence of LBP and LBP hazards on a surface-by-surface basis. Abatement of all LBP or LBP hazard is required. A description of the abatement activities must be provided to the prospective transferee. Also, the prospective transferee must be provided a lead hazard information pamphlet and the contract for sale or lease must include a lead warning statement.

The above requirements do not apply in the following cases:

- o The building is scheduled for demolition by the transferee and the transfer document prohibits occupation of the building prior to the demolition.
- o The building is scheduled for nonresidential use.
- o The building is scheduled for residential use and the transferee conducts renovation activities consistent with regulatory requirements for the abatement of LBP hazards.

According to the Stations P-164 Building Database, a total of 1,426 residential structures (including 354 detached housing facilities) are located on-Station.

The Navy Public Works Center (NPWC), San Diego will soon complete a survey of MCAS El Toro Family Housing and related facilities for LBP. As part of this survey, family housing units will be tested in accordance with the applicable standards and Naval Facilities Engineering Command (NAVFACENGCOM) guidance. All field sampling has been completed at this time. NPWC is waiting for final sampling results. Preliminary results indicate that lead-based paint was found in many of the units surveyed; however, none of the LBP is considered to be a threat to human health (Memorandum, T.H. Christensen/Assistant Chief of Staff Installations, 30 December 1994).

3.2.12 Air

The Station currently operates under a single Regional Clean Air Incentives Market (RECLAIM) permit. The permit was issued to the Station by the South Coast Air Quality Management District (SCAQMD) in July 1994. The RECLAIM Permit outlines all recording, monitoring, and reporting requirements for the Station. Under the RECLAIM permit, the Station is required to submit an annual air emissions report to the SCAQMD.

Currently, there are 124 pieces of equipment at MCAS El Toro that are addressed under the RECLAIM permit. Many other emissions sources at the Station are exempt from testing under SCAQMD Rule 219 due to their small size.

The SCAQMD is also currently revising its 20-year Air Quality Management Plan (AQMP). The goal of the AQMP is to reduce the total air emissions in California in an attempt to bring the state into compliance with the EPA's air quality standards. An investigation has been conducted by the Station to assess the impact potential of the AQMP to the Station. It was recommended in the 1991 Master Plan that the AQMP should continue to be monitored by the Station.

In addition to the air permits discussed above, the Station's aircraft fire training exercises are also overseen by the SCAQMD. The Station has two concrete-lined burn pits located adjacent to IRP Site 16. The locations of these burn pits are shown in Figure 3-1. Both pits were constructed in 1988, but only one is currently used. The western burn pit was only used one time. It was retired because the builder used an improper type of concrete that deteriorated during the initial burn event; however, no significant cracks are evident in the floor of the pit.

Only JP-5 is burned in the eastern pit. Burns typically last three to ten minutes and are conducted approximately four to six times per month. According to MCAS El Toro Crash Crew Department staff, Station policy is to notify the SCAQMD of all planned burns.

3.3 STATUS OF NATURAL AND CULTURAL RESOURCES

The following subsections discuss the status of identification of natural and cultural resources at MCAS El Toro. These sections address threatened and endangered species, wetlands, surface waters, floodplains, archaeological resources, historic structures, and paleontological resources.

3.3.1 Ecological Resources

Approximately 75 percent of the native habitats of MCAS El Toro have been cleared for agriculture, housing, and Station operations. Native vegetation and animal species are primarily condensed in an approximately 1,200-acre area located in the northeast portion of the Station. Much of this natural area is undeveloped, although the EOD range, ordnance storage areas, pistol range, Fuel Farm 555, communications station, archery range, and numerous unpaved roads are within this area. Undisturbed areas within this natural area are generally covered with native vegetation, including coastal sage scrub, riparian scrub, and grassland communities. The extent of vegetation in this area is shown in Figure 3-3a (Vegetation Communities in Natural Area). A summary of the types of vegetative cover and other features within the natural area is provided in Table 3-15 (Vegetative Cover and Other Features within Natural Area).

Military training operations that occur within this natural area include unit conditioning marches, land navigation courses, and combat vehicles training. With the base housing units located on the northern side of the natural area, it is also used by joggers, hikers, and bikers (Dames & Moore [D&M], 1994).

The natural habitat located in this portion of the Station is used by many species of wildlife. The area is heavily used by numerous wintering avian species, including neotropical birds and birds of prey. In addition to bird species, reptiles and mammals are also present in the natural area, as well as a smaller number of amphibian species (D&M, 1994).

Based on recent field surveys by U.S. Fish and Wildlife Service (USFWS) (1993) and a study by D&M, various sensitive species are known to occur at MCAS El Toro at this time. These sensitive species include one sensitive amphibian, three reptilian, twelve avian, and four mammalian species are known to occur at MCAS El Toro. Of these, only one species, the California gnatcatcher, is listed as threatened under the Federal Endangered Species Act and none are listed under the California Endangered Species Act. Information on the presence of sensitive species was acquired through literature searches, including the California Natural Diversity Database (CNDDDB) Rarefind Reports, the Orange County database, and contacts with the USFWS and California Department of Fish and Game (CDFG) (D&M, 1994). The sensitive species present at the Station are listed in Table 3-16 (Special-Status Wildlife Species at MCAS El Toro).

3.3.2 Wetlands and Waters

Based on a review of National Wetland Inventory maps and field surveys by D&M performed in July 1994, two seasonal ponds are located at MCAS El Toro. The locations of these ponds are shown in Figure 3-3b (Wetlands and Waters). One area, the stock pond, is artificial, but functions as a wetland with 0.67 acre of the pond qualifying as a jurisdictional wetland. The second area is a dense stand of mulefat scrub in a topographic depression that covers 0.24 acre, and is also considered a wetland (D&M, 1994).

The D&M study identified two other features in the natural area that are considered waters of the United States: Borrego Canyon Wash and Agua Chinon Wash. These features are shown in Figure 3-3b. Borrego

Canyon Wash and its branches support some riparian vegetation. The average width of the ordinary high water mark is up to 6 feet in most branches. These are identified as reaches A through D in Figure 3-3b. Agua Chinon Wash is located along the west side of the natural area and is a broad, shallow dry wash with mulefat scrub and a large stand of willows (D&M, 1994).

Further investigation will be required to determine the extent of wetlands and waters on the remaining portions of MCAS El Toro.

3.3.3 Floodplains

MCAS El Toro is situated at the outlets of four large canyons that produce storm flows during periods of heavy rainfall. Storm runoff from these canyons is channeled into Marshburn Channel, Bee Canyon Wash, Agua Chinon Wash, and Borrego Canyon Wash. The drainage channels flow southwesterly and are tributaries of San Diego Creek located southwest of the Station. Existing storm drain facilities on-Station consist of ditches and subsurface pipes that direct local runoff to the drainage channels (MCAS El Toro, 1991).

The MCAS El Toro Master Plan indicates that much of the Station lies within the 100-year flood plain due to existing agricultural drains that cannot carry the urbanized 100-year flood. The predicted 100-year flood plain resulting from off-Station runoff covers nearly 40 percent of the Station. The area encompassed by the predicted 100-year flood is shown in Figure 3-3c (Natural and Cultural Resources Features). The Master Plan indicates that the potential flooding problems at the Station would be alleviated by the year 2001 by the phased implementation of

the Orange County Flood Control District's San Diego Creek Flood Control Master Plan.

3.3.4 Archaeological Resources

In 1987, the U.S. Army Corps of Engineers (COE) conducted an Archaeological Resources Assessment to identify possible archaeological sites at MCAS El Toro (COE, 1987). The area surveyed was confined to the approximate 900-acre area of undisturbed native soils located in the northeast portion of the Station. Ten minor archaeological sites and eight isolated artifactual findings contained wholly or partially within the Station's boundaries were identified. The locations of these archaeological sites are shown in Figure 3-3c. The sites and findings tended to be located on ridge tops and at elevations above the Borrego Canyon Wash. According to the survey report, the majority of the findings observed during the assessment had been used by native American Indians for food procurement and processing. Seven of the 10 archaeological sites were recommended for further evaluation to determine whether they are eligible for nomination to the National Register of Historic Places.

An archaeological survey has not been performed for the remainder of MCAS El Toro because native soils were completely disturbed during construction. Any artifacts would have been destroyed during development of the Station facilities (memorandum from B. Wilson/MCAS El Toro Installations, 1994).

3.3.5 Historic Structures

MCAS El Toro was established during World War II (WW II) and no structures earlier than this period are present at the Station. A survey of WW II-age buildings at the Station was performed by the COE as part of a nationwide effort funded by DOD and approved by the Council on Historic Preservation. It was reported that, for the most part, the majority of the remaining WW II buildings at the Station have been greatly modified and are located in highly altered settings. The only building identified as possibly being eligible for listing on the National Historic Register was the Station's theater (Building 271). The location of this building is shown in Figure 3-3c. The theater has been renovated numerous times and it is unlikely that it will meet eligibility requirements for listing on the National Historic Register (memorandum from B. Wilson/MCAS El Toro Installations, 1994).

3.3.6 Paleontological Resources

A paleontological resources survey has not been performed at the Station. The area surrounding MCAS El Toro is known for its rich paleontological resources. Due to the impacts of construction on the main portion of the Station, it is unlikely that any valuable paleontological resources still remain in this area. Therefore, a conservation plan would not be required for this developed portion of the Station. Because the natural area (approximately 1,200 acres) is in a relatively undisturbed state, any significant construction related to reuse would require a preservation plan for this area (memoranda from B. Wilson/MCAS El Toro Installations, 1994 and 1995).

3.4 ENVIRONMENTAL CONDITION OF PROPERTY

The environmental condition of property at MCAS El Toro involves the categorization of the various LOCs identified at the Station into one of the seven area types or categories identified in the BCP guidebook. LOCs are defined as locations or areas of environmental concern such as IRP sites, USTs, ASTs, OWSs, less than 90-day accumulation areas, PCB transformer locations, RFA SWMUs/AOCs, buildings with ACMs, and miscellaneous areas such as areas of potential environmental concern identified in aerial photographs and personnel interviews. These items are discussed and tabulated in Subsections 3.1 (Environmental Program Status) and 3.2 (Compliance Program Status).

The BCP guidebook defines the seven area types (BCP Area Types) as follows:

- 1) Areas where no storage, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)
- 2) Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred)
- 3) Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action

- 4) Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken
- 5) Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are underway, but all required remedial actions have not yet been taken
- 6) Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented
- 7) Areas that are unevaluated or require additional evaluation

The current status of the environmental condition of property at MCAS El Toro has been evaluated for the BCP. Based on this evaluation, each LOC identified at the Station (refer to Table 3-1a) has been assigned a BCP Area Type. The Area Types are shown graphically in Figure 3-4 (Environmental Condition of Property). In this figure, each LOC is displayed with a 100-foot buffer zone. Each BCP Area Type is assigned a unique pattern; a more limiting BCP Area Type over-writes a less limiting BCP Area Type when overlap of LOCs occurs. For example, Area Type 6 LOCs over-write Area Type 3 LOCs. The following sections summarize the types of LOCs in each of the seven BCP Area Types.

3.4.1 BCP Area Type 1 (Areas Where No Storage, Release, or Disposal Has Occurred)

LOCs at the Station qualifying as BCP Area Type 1 include the following:

- o SWMUs/AOCs that were evaluated in the PR and VSI portions of the RFA, and were found to be areas where no storage, release, or disposal of hazardous materials occurred.
- o PCB transformer locations where transformers are or were formerly operated, and no release is known to have occurred.
- o Station buildings (the presence of building materials such as ACMs, LBP, and/or PCBs [in light ballasts] will not affect the ability to transfer building "as is." However, the DON will need to disclose the known presence of these materials in buildings to any potential purchaser of the property.)

3.4.2 BCP Area Type 2 (Areas Where Only Storage Has Occurred)

BCP Area Type 2 includes those LOCs where available information indicates that only storage of hazardous materials has occurred or is ongoing, and no release(s) are known to have occurred. LOCs identified at the Station as Area Type 2 include the following:

- o Less than 90-day accumulation areas and RFA SWMUs/AOCs that have shown no evidence of release as determined by visual inspections and/or soil sampling results.

- o UST removal sites where soil sample analytical results are below detection limits.

3.4.3 BCP Area Type 3 (Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, but Require No Remedial Action)

BCP Area Type 3 includes those LOCs where available information indicates that a release has occurred, but that sampling results indicate that no remedial action is required. BCP Area Type 3 LOCs identified at the Station include:

- o RFA SWMUs/AOCs that were included in the Sampling Visit and, based on the soil sample results, were recommended for no further action.
- o UST removal sites where soil sample analytical results indicate that petroleum hydrocarbons were detected, but at concentrations below LUFT levels. Closure of these sites is pending agency approval.

3.4.4 BCP Area Type 4 (Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, and All Remedial Actions Have Been Taken)

Currently, no BCP Area Type 4 LOCs are known to exist on-Station.

3.4.5 BCP Area Type 5 (Areas Where Storage, Release, Disposal, and/or Migration Has Occurred and Action is Underway, but Not Final)

Currently, no BCP Area Type 5 areas are known to exist on-Station.

3.4.6 BCP Area Type 6 (Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, but Required Response Actions Have Not Been Taken)

BCP Area Type 6 sites are those areas where response actions have been identified but have not been implemented. LOCs identified on-Station as BCP Area Type 6 include:

- o IRP sites being evaluated in the ongoing RI/FS phase of the program. The response actions have not yet been implemented for any of the sites.
- o UST removal sites with known soil contamination that have not yet been remediated.
- o RFA SWMUs/AOCs recommended for response actions in the RFA (e.g., repair of cracks in pavement, excavation of shallow stained soil).
- o OWSs with RFA sampling results that indicate releases have likely occurred and will possibly require remediation (SWMUs/AOCs 173 and 175).

3.4.7 BCP Area Type 7 (Unevaluated Areas or Areas Requiring Additional Evaluation)

This category encompasses areas at the Station that, based on available information, are unevaluated or require additional evaluations.

LOCs where data gaps exist are included in this category. BCP Area Type 7 LOCs include the following:

- o Currently in-place USTs, OWSs, and ASTs at the Station, with the exception of those that were found to be contaminated (BCP Area Type 6) based on RFA Sampling Visit results. These LOCs will require some further investigation to determine if a release has occurred.
- o RFA SWMUs/AOCs that were recommended for additional investigation in the RFA and/or by DTSC (i.e., sampling).
- o Miscellaneous LOCs, including the following:
 - Fuel supply pipelines
 - Silver recovery unit locations
 - Former Desert Storm waste storage area near DRMO Storage Yard No. 3
 - Former water tower locations (possible mercury releases)
 - Active and inactive lined burn pits
 - Current and former pesticide storage areas
 - PCB transformer storage areas
 - PCB equipment storage area
 - Inactive former RCRA-permitted facility (Building 673-T3)
- o Less than 90-day accumulation areas that were constructed after completion of the RFA, and have not been visually inspected or sampled.

- o Aerial photograph features/anomalies recommended for further evaluation.
- o Locations of potential environmental concern identified in interviews with current and former Station personnel held on 26 May 1994.

3.4.8 Suitability of Installation Property for Transfer by Deed

Final determinations on the suitability of Station property for transfer have not yet been made. Identification of uncontaminated parcels under CERFA will be made after preparation of CERFA and EBS documents and concurrence by the agencies. In the draft version of the CERFA and EBS Reports (Jacobs, 1994a and Jacobs, 1994c, respectively), 20 parcels (approximately 2,527 acres) were identified as uncontaminated under CERFA. (These parcels do not correspond to the reuse parcels identified in this BCP.) It is anticipated that a decision on concurrence from the agencies regarding the 20 CERFA parcels will be received by late March 1995.

Based on the information presented in Subsection 3.4.7, none of the reuse parcels identified at MCAS El Toro appears to be currently suitable for transfer as a whole. Creation of subdivisions of parcels may be considered to expedite property transfer. Subdivisions may be based on CERFA parcels identified at the Station.

3.5 STATUS OF COMMUNITY INVOLVEMENT

3.5.1 Community Relations Plan

As part of the IRP, a Community Relations Plan (CRP) was prepared and issued for MCAS El Toro in February 1991. The CRP describes the approach the Marine Corps will use to address community concerns and issues. It also details outreach and participation activities designed to address community concerns and ensure adequate and timely public participation in installation restoration activities. MCAS El Toro will modify its CRP on an annual basis or as appropriate to address changes in cleanup activities and community concerns, and to remain consistent with regulatory guidelines.

Key components of the DON community relations activities associated with IRP and RCRA activities include Restoration Advisory Board (RAB) meetings, fact sheets, site tours, workshops, and press releases as required by regulations and as needed by the impacted community. The community relations program is designed to be flexible, and to address changing site conditions and community concerns. The DON has taken a proactive approach to community relations activities and intends to be open and responsive to the community during the IRP.

3.5.2 Designated Contacts

The designated MCAS El Toro contacts are:

Joseph Joyce

BRAC Environmental Coordinator

MCAS El Toro

P.O. Box 95001
Santa Ana, CA 92709-5001
714/726-3470

Dorothy Wilson
Community Relations Coordinator
U.S. Environmental Protection Agency
75 Hawthorne Street (H-1-1)
San Francisco, CA 94105
415/744-2179

Claire Best
Public Participation Specialist
California Environmental Protection Agency
245 West Broadway, Suite 350
Long Beach, CA 90802-4444
310/590-4949

3.5.3 Information Repositories

An information repository has been established at the Heritage Park Library in Irvine. This location contains documents related to the IRP process, including work plans, technical reports, and community relations materials (the CRP, fact sheets, news releases, and RAB meeting minutes). A second repository has been established at the Station Library at MCAS El Toro.

3.5.4 Administrative Record

The Administrative Record (AR) file has been maintained at the MCAS El Toro EO and is updated quarterly in accordance with CERCLA. It includes all records of public involvement and all information on which the decision for IRP remedial actions are based. Copies of these records are on file at the Heritage Park Library information repository.

3.5.5 Restoration Advisory Board

A Technical Review Committee (TRC) was formed in 1991 to provide a forum for public communications on proposed environmental issues. The TRC included representatives from MCAS El Toro, DON, RWQCB, DTSC, and the local community. In September 1993, DOD issued guidance to implement President Clinton's Five Point Plan for economic recovery, which resulted in the conversion of the MCAS El Toro TRC to a RAB.

The RAB, which uses the TRC membership as a nucleus, has been formed to provide input into the cleanup program at MCAS El Toro and the transfer of property to the local community for reuse. Membership to the RAB was sought through public notification in the Orange County Register and the Orange County Edition of the Los Angeles Times. An introductory formation meeting was held on 13 January 1994. From the responses to the notification and membership applications received, RAB members were initially selected. Final selection of RAB members was completed in April 1994. Ms. Marcia Rudolf, a community representative, is a co-chair for the RAB, along with the MCAS El Toro BEC. A mission statement has been developed to provide a framework for the functions and administration of the RAB.

The RAB has held several organizational, informational, and formal meetings to date (April, June, August, October, December of 1994, and January of 1995). Subcommittees have been formed to review documents associated with categories of major environmental activities occurring on the installation. The subcommittees will provide comments on the documents associated with these activities as they become available for review. Subcommittees have a standard 30-day review period in which to provide recommendations and comments to the BCT. The RAB and its subcommittees do not, however, serve as formal advisory bodies. The OU-1 subcommittee is currently reviewing documents. A subcommittee has also been formed to review and provide comments on this revised BCP.

All RAB meetings are open to the public and announced in the Orange County Register 1 week in advance. Technical presentations to assist RAB members in understanding complex environmental issues have been provided on an ongoing basis.

3.5.6 Mailing List

A mailing list of all interested parties in the community is maintained by the CLEAN II contractor. This list is updated once per quarter. It contains all RAB members, Station housing residents, regulatory agencies, and interested members of the general public.

3.5.7 Fact Sheets

Fact sheets are used to inform the public of the status of the IRP and significant events associated with environmental cleanup at MCAS El Toro. These fact

Chapter 3**Installation-Wide Environmental Program Status**

sheets are required by both state and federal regulations at key milestones of the cleanup process. Some of these milestones are listed below:

- o Establishment of the RAB
- o Commencement of the RI/FS
- o Announcement of a proposed plan
- o Completion of a final remedial design (RD)
- o Prior to the start of a planned removal action

Fact sheets issued to date are as follows:

November 1991	Information Update/IRP Process
December 1992	Information Update
December 1993	Phase I RI Results
December 1993	RAB Formation

These fact sheets are available at the information repositories.

3.5.8 Technical Assistance Grants

A Technical Assistance Grant (TAG) program has been established by EPA to assist citizens groups in understanding technical information that assesses potential hazards and the selection and design of appropriate response actions at Superfund sites. To date, no local community or environmental group in the MCAS El Toro area has requested or received such a grant.

3.5.9 Public Meetings

To date, the following public meetings on the environmental programs at MCAS El Toro have been held:

18 November 1991	Public Meeting
19 and 20 June 1992	Open House
13 January 1994	RAB Formation Meeting
28 April 1994	First RAB Meeting
2 June 1994	RAB Meeting
25 August 1994	RAB Meeting
12 October 1994	RAB Meeting
13 December 1994	RAB Meeting
31 January 1995	RAB Meeting
28 February 1995	RAB Meeting

3.5.10 Federal Facility Agreement Process

In October 1990, the Navy, EPA, and Cal-EPA (DTSC and RWQCB) signed an FFA. This agreement established a schedule for each environmental study and defined the responsibilities of each party. This cooperative agreement is intended to help accelerate and streamline the IRP at MCAS El Toro. Based on preliminary agreements with EPA, DTSC, MCAS El Toro, and SWDIV, the FFA schedule will be updated using the BCP. (The IRP is the Navy equivalent to the EPA CERCLA process.)

3.5.11 Environmental Impact Statement Process

At this time, no EISs for base closure have been prepared for MCAS El Toro. EISs will be developed as a component of property disposal and reuse. During development of these EISs, several public scoping meetings will be held. Public comments on the draft EIS documents will be considered and addressed in the final versions of the EISs.

Table 3-1a
Site Summary
MCAS EI Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
2F	1	IRP 1	Explosive Ordnance Disposal Range	Excess ordnance which included sulfur trioxide chlorosulfonic acid.	1952 to 1982	RI in progress	Unit 1: < 0.01	FFA		
5C	2	IRP 2	Magazine Road Landfill	Inert and municipal solid waste, unspecified industrial wastes, lead batteries, transformers, household refuse, hydraulic fluid, unspecified waste fuels, crankcase oil, lead-based paint residue, and scrap metal.	1950 to 1980	RI in progress	Unit 1: 0.22 Unit 2: < 0.01	FFA		
2A	3	IRP 3	Original Landfill	Municipal solid waste, scrap metal, incinerator ash, construction debris, paint residues, unspecified oily wastes, industrial solvents, hydraulic fluid, and engine coolants.	1943 to 1955	RI in progress	Unit 1: 1.01	FFA		Includes SWMUs/AOCs 10, 194, & 300
2A	4	IRP 4	Ferrocene Spill Area	Ferrocene spill material from engine test cell.	1983	RI in progress	Unit 1: 8.34			
3B	5	IRP 5	Perimeter Road Landfill	Municipal solid waste, unspecified fuels, solvents and cleaning fluids, scrap metals, paint residues, and unspecified oily wastes.	1955 to late 1960s	RI in progress	Unit 1: 0.27	FFA		
5A	6	IRP 6	Drop Tank Drainage Area No. 1	Rinsed aircraft drop tanks. Wastes included JP-5 and lubrication oils.	1969 to 1983	RI in progress	Unit 1: 0.06 Unit 2: 0.02 Unit 3: 1.03	FFA		Includes SWMU/AOC 236
5A	7	IRP 7	Drop Tank Drainage Area No. 2	JP-5 and lubrication oils in rinse water from aircraft drop tanks.	1969 to 1983	RI in progress	Unit 1: 51.75 Unit 2: < 0.01 Unit 3: 69.49 Unit 4: < 0.01 Unit 5: 10.30	FFA		
4B	8	IRP 8	DRMO Storage Yard	Release of PCB-containing transformer fluid.	Mid-1970s to present	RI in progress	Unit 1: 47.92 Unit 2: < 0.01 Unit 1,006.75 Unit 4: 81.40 Unit 5: < 0.01	FFA		Includes SWMUs/AOCs 71& 72

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
5A	9	IRP 9	Crash Crew Pit No. 1	Burned leaded AVGAS, JP-5, and crankcase oil in unlined pits for fire training.	1965 to 1971	RI in progress	Unit 1: 0.30	FFA		Includes SWMUs/AOCs 104, 105, & 106
5A	10	IRP 10	Petroleum Disposal Area	Crankcase oil, antifreeze, hydraulic and transmission fluids, motor fuel and solvent.	1952 to present	RI in progress	Unit 1: 12.13 Unit 2: < 0.01	FFA		
4A	11	IRP 11	Transformer Storage Area	Stored PCB-containing transformers.	1968 to 1983	RI in progress	Unit 1: 124.7 Unit 2: 90.09	FFA		
4B	12	IRP 12	Sludge Drying Beds	Wastewater sludges applied to land.	1943 to 1972	RI in progress	Unit 1: 31.42 Unit 2: 3.24 Unit 3: 86.24	FFA		
1A	13	IRP 13	Oil Change Area	Releases of crankcase oil.	1977 to 1983	RI in progress	Unit 1: 1.00 Unit 2: 6.67	FFA		Includes SWMU/AOC 90
1A	14	IRP 14	Battery Acid Disposal Area	Vehicle battery acid, lubrication oil, and paint residue.	1977 to 1983	RI in progress	Unit 1: 115.3 Unit 2: 18.72	FFA		
1D	15	IRP 15	Suspended Fuel Tanks	Diesel fuel leaked onto soil.	1979 to 1984	RI in progress	Unit 1: 0.02	FFA		
5A	16	IRP 16	Crash Crew Pit No. 2	Burned JP-5, AVGAS, hydraulic fluid, crankcase oil, white phosphorus, magnesium phosphate, and napalm in unlined pits for fire training.	1972 to 1985	RI in progress	Unit 1: < 0.01 Unit 2: 0.07 Unit 3: 0.01	FFA		
5C	17	IRP 17	Communications Station Landfill	Landfilled cooking grease, oils, fuels, and municipal debris.	1981 to 1983	RI in progress	Unit 1: 10.89 Unit 2: 0.31	FFA		
NA	18	IRP 18	VOC Contaminated Groundwater Emanating from Southwest Quadrant (3)	VOC contaminants in groundwater from source in southwest quadrant of Station		FS in progress		FFA		
5A	19	IRP 19	Aircraft Expeditionary Refueling (ACER) Site	Fuel storage area experienced minor fuel spills and leaks throughout operational history. A 15,000-gallon JP-5 spill occurred in 1986. Affected soil was excavated and replaced.	1964 to 1987	RI in progress	Unit 1: 43.56 Unit 2: 0.02 Unit 3: < 0.01	FFA		

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1B	20	IRP 20	Hobby Shop	Kerosene was formerly used to wash down pavement, collected in oil/water separators which discharge to nearby drainage ditches. Stained soil from petroleum products.	1967 to present	RI in progress	Unit 1: < 0.01 Unit 2: 2.13 Unit 3: 18.83 Unit 4: 0.21	FFA		
4B	21	IRP 21	Materials Management Group, Bldg. 320	Outdoor drum storage area for chemical storage, including temporary storage of chemicals with expired shelf lives.	1964 to 1986	RI in progress	Unit 1: 0.15	FFA		Includes SWMU/AOC 94
5A	22	IRP 22	Tactical Air Fuel Dispensing System (TAFDS)	Air fueling station with history of undocumented fuel spills and leaks. Location of several fuel bladder revetments.	1980 to 1986	RI in progress	Unit 1: 10.61 Unit 2: 0.02	FFA		
4A,4B, 5A	23	IRP 24	Possible VOC Source Area (5)	Various activities in this area, including former metal plating operations, may have contributed to the regional VOC groundwater contamination.		RI in progress		FFA		
NA	24	IRP 25	Major Drainages	Four drainage channels that flow through or adjacent to the Station receive stormwater discharges from the Station.		RI in progress	Agua Chinon soil: < 0.01 water: 0.06 Bee Canyon soil: 0.09 water: 1.6 Marshburn Ch. soil: 0.03 water: 0.47 Borrego Canyon water: 1.53	FFA		Includes SWMUs/AOCs 3, 4, 5, and 11
1A	25	APHO 1	Stain							
2A	26	APHO 2	Open storage, Drum							
2A	27	APHO 3	Open storage, Drum							
2A	28	APHO 4	Stain							

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1D	29	APHO 5	Open storage							
4A	30	APHO 6	Impoundment							
4A	31	APHO 7	Wet soil, Stain, Open storage							
5A	32	APHO 8	Open storage, Refuse, Excavation, Fill area							
5A	33	APHO 9	Liquid							
5A	34	APHO 10	Open storage							
4A	35	APHO 11	Trench, Disturbed Ground							
3A	36	APHO 12	Wet soil							
2B	37	APHO 13	Drum							
2B	38	APHO 14	Stain, Wet soil							
5A	39	APHO 15	Stain							
1A	40	APHO 16	Wet soil, Liquid							
4A	41	APHO 17	Stain							
4A	42	APHO 18	Stain							
4A	43	APHO 19	Stain, Liquid							
3B	44	APHO 20	Excavation, Liquid							
3A	45	APHO 21	Open storage, Drum							
1A	46	APHO 22	Stain, Drum							
5A	47	APHO 23	FBR, Stain							
5A	48	APHO 24	Extraction							
2A	49	APHO 25	Mounded material, Refuse							
2A	50	APHO 26	Excavation, Liquid							
1A	51	APHO 27	Stain, Wet soil							
2A	52	APHO 28	Liquid							
1A	53	APHO 29	Wet soil, Liquid							
5B	54	APHO 30	Unidentified object							
3B	55	APHO 31	Disturbed Ground, Mounded material dark-toned,							
5A	56	APHO 32	Stain							
1D	57	APHO 33	Open storage							

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1A	58	APHO 34	Stain, Unidentified object, Vertical tank							
2A	59	APHO 35	Open storage							
2A	60	APHO 36	Wet soil							
5A	61	APHO 37	Stain							
3A	62	APHO 38	Excavation							
5A	63	APHO 39	Wet soil, Stain, Horizontal tank							
1B	64	APHO 40	Drum							
1A	65	APHO 41	Stain, Wet soil							
3A	66	APHO 42	Wet soil							
3B	67	APHO 43	Excavation							
5C	68	APHO 44	Disturbed Ground, Mounded material							
2B	69	APHO 45	Wet soil, Stain, Liquid, Drum							
3B	70	APHO 46	Impoundment, Fill area, Excavation							
2B	71	APHO 47	Open storage, Bldg., Debris							
2B	72	APHO 48	Open storage, Drum							
5A	73	APHO 49	Wet soil, Liquid							
5A	74	APHO 50	Trench							
3B	75	APHO 51	Stain							
1A	76	APHO 52	Stain							
1A	77	APHO 53	Stain							
2C	78	INT LF1	Possible landfill area next to family housing							Identified in interviews
3B,3F	79	INT LF2	Possible landfill area south of IRP Site 5							Identified in interviews
5A	80	MSC B1	Active Burn Pit adjacent to IRP Site 16							
5A	81	MSC B2	Inactive Burn Pit adjacent to IRP Site 16							
3B	82	MSC D1	Desert Storm waste storage area near DRMO Yard #3							
NA	83	MSC JP5	JP-5 fuel supply pipelines							
3F	84	MSC P1	Past pesticide storage area at Bldg. 1687							

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
3F	85	MSC P2	Past pesticide storage area near Bldg. 464							
1G	86	MSC W1	Former elevated water reservoir (west tower)							Reported past mercury releases from level gauge
1G	87	MSC W2	Former elevated water reservoir (east tower)							Reported past mercury releases from level gauge
1A	88	UST 11	500-gal Diesel							
1A	89	UST 12	500-gal Diesel							
1A	90	UST 13	500-gal Diesel							
1A	91	UST 14	500-gal Diesel							
1A	92	UST 24	500-gal Diesel							
1D	93	UST 32	500-gal Diesel							
1D	94	UST 33	500-gal Diesel							
1D	95	UST 34	500-gal Fuel Oil							
1D	96	UST 35	500-gal Fuel Oil							
1D	97	UST 37	500-gal Diesel							
1D	98	UST 38	1,500-gal Fuel Oil							
1D	99	UST 40	500-gal Diesel							
1D	100	UST 41	500-gal Diesel							
1D	101	UST 42	500-gal Fuel Oil							
1D	102	UST 43	500-gal Fuel Oil							
1D	103	UST 44	500-gal Diesel							
1D	104	UST 45	500-gal Fuel Oil							
1D	105	UST 46	500-gal Diesel							
1D	106	UST 53	500-gal Diesel							
1C	107	UST 57	15,000-gal Fuel Oil							
1C	108	UST 58	5,300-gal Diesel							
1C	109	UST 59	5,300-gal Diesel							
1C	110	UST 60	2,000-gal Diesel							

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1C	111	UST 62	500-gal Fuel Oil							
1B	112	UST 68	500-gal Diesel							
1B	113	UST 69	500-gal Fuel Oil							
1B	114	UST 70	500-gal Diesel							
1B	115	UST 71	500-gal Fuel Oil							
1B	116	UST 72	500-gal Diesel							
1B	117	UST 73	500-gal Diesel							
1B	118	UST 74	500-gal Diesel							
1B	119	UST 77	500-gal Diesel							
1B	120	UST 78	500-gal Diesel							
1B	121	UST 79	500-gal Fuel Oil							
1B	122	UST 80	500-gal Diesel							
1B	123	UST 81	500-gal Diesel							
1B	124	UST 82	500-gal Diesel							
1B	125	UST 94	1,500-gal Fuel Oil							
5A	126	UST 116	500-gal Diesel							
5A	127	UST 117	500-gal Diesel							
2A	128	UST 126	500-gal Diesel							
2A	129	UST 133	500-gal Diesel							
2A	130	UST 138	1,000-gal Diesel							
1C	131	UST 146	2,600-gal Unknown Contents							
4B	132	UST 159	200-gal Fuel Oil							
1A	133	UST 176	25,000-gal Aviation Gas							
1A	134	UST 177	50,000-gal Aviation Gas							
1A	135	UST 178	50,000-gal Aviation Gas							SWMU/AOC 48
1A	136	UST 179	25,000-gal Aviation Gas							SWMU/AOC 49
1A	137	UST 180	25,000-gal Aviation Gas							SWMU/AOC 51
1A	138	UST 181	50,000-gal Aviation Gas							
1A	139	UST 182	50,000-gal Aviation Gas							SWMU/AOC 52

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1A	140	UST 183	25,000-gal Aviation Gas							
1D	141	UST 184	25,000-gal Unknown Contents							
1D	142	UST 185	50,000-gal Unknown Contents							
1D	143	UST 186	25,000-gal Unknown Contents (Tank Farm 2)							SWMU/AOC 275
1D	144	UST 187	50,000-gal Aviation Gas							SWMU/AOC 276
1A	145	UST 188	25,000-gal Unknown Contents							SWMU/AOC 277
1A	146	UST 189	50,000-gal Waste Oil							SWMU/AOC 57
1A	147	UST 190	50,000-gal Unknown Contents							SWMU/AOC 278
1A	148	UST 191	25,000-gal Waste Oil							SWMU/AOC 59
1A	149	UST 192	25,000-gal Unknown Contents							
1A	150	UST 193	50,000-gal Unknown Contents							SWMU/AOC 279
1A	151	UST 194	50,000-gal Unknown Contents							
1A	152	UST 195	25,000-gal Waste Oil							SWMU/AOC 280
2A	153	UST 196	25,000-gal Diesel							
2A	154	UST 197	50,000-gal Diesel							
2A	155	UST 198	50,000-gal JP-5							
2A	156	UST 199	25,000-gal JP-5							
2A	157	UST 200	25,000-gal JP-5							
2A	158	UST 201	50,000-gal JP-5							
2A	159	UST 202	50,000-gal JP-5							
2A	160	UST 203	25,000-gal JP-5							
5A	161	UST 204	50,000-gal R JP-5							SWMU/AOC 60
5A	162	UST 205	25,000-gal R JP-5							SWMU/AOC 61
5A	163	UST 206	50,000-gal Premium Gas							SWMU/AOC 62
5A	164	UST 207	50,000-gal Premium Gas							SWMU/AOC 63
2A	165	UST 208	50,000-gal Aviation Gas							
2A	166	UST 209	25,000-gal JP-5							
2A	167	UST 210	25,000-gal JP-5							
2A	168	UST 211	50,000-gal JP-5							

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
2A	169	UST 212	50,000-gal JP-5							
2A	170	UST 213	25,000-gal JP-5							
2A	171	UST 214	25,000-gal JP-5							
2A	172	UST 215	50,000-gal JP-5							
2A	173	UST 216	50,000-gal Diesel							
2A	174	UST 217	25,000-gal Diesel							
2A	175	UST 218	25,000-gal Diesel							
1B	176	UST 219	50,000-gal Unknown Contents							
1B	177	UST 220	25,000-gal Unknown Contents							
1B	178	UST 221	25,000-gal Unknown Contents							
1D	179	UST 224	500-gal Fuel Oil							
1A	180	UST 241	850-gal Diesel							
1A	181	UST 243	1,500-gal Fuel Oil							
1D	182	UST 247	1,500-gal Fuel Oil							
1D	183	UST 248	1,500-gal Fuel Oil							
1D	184	UST 249	1,500-gal Fuel Oil							
1D	185	UST 250	1,500-gal Fuel Oil							
1D	186	UST 251	2,000-gal Fuel Oil							
NL	187	UST 252	1,400-gal Diesel							SWMU/AOC 281 Location Unknown.
1D	188	UST 253	1,500-gal Fuel Oil							
1D	189	UST 254	1,500-gal Fuel Oil							
1D	190	UST 255	1,500-gal Fuel Oil							
1C	191	UST 256	2,000-gal Fuel Oil							
1C	192	UST 257	2,000-gal Fuel Oil							
1C	193	UST 258	2,000-gal Fuel Oil							
1C	194	UST 259	2,600-gal Fuel Oil							
1C	195	UST 260	2,600-gal Fuel Oil							

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Site Summary
MCAS EI Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1B	196	UST 263	3,400-gal Diesel							
1B	197	UST 264	3,400-gal Diesel							
1B	198	UST 265	1,400-gal Diesel							
1B	199	UST 266	1,500-gal Fuel Oil							
1B	200	UST 267	1,500-gal Fuel Oil							
1B	201	UST 268	1,500-gal Fuel Oil							
1B	202	UST 269	1,500-gal Fuel Oil							
1B	203	UST 270	1,500-gal Fuel Oil							
1B	204	UST 272	1,500-gal Fuel Oil							
1B	205	UST 273	300-gal Fuel Oil							
1B	206	UST 274	1,500-gal Fuel Oil							
1B	207	UST 275	1,500-gal Fuel Oil							
1B	208	UST 276	1,500-gal Fuel Oil							
1B	209	UST 277	1,500-gal Fuel Oil							
1B	210	UST 279	1,500-gal Fuel Oil							
1B	211	UST 280	2,000-gal Diesel							
1B	212	UST 281	2,000-gal Fuel Oil							
1B	213	UST 282	1,500-gal Fuel Oil							
1B	214	UST 283	1,500-gal Fuel Oil							
1B	215	UST 284	2,000-gal Fuel Oil							
1B	216	UST 285	2,000-gal Fuel Oil							
5A	217	UST 288	1,500-gal Fuel Oil							
2A	218	UST 292	1,500-gal Diesel							
5A	219	UST 294	1,500-gal Fuel Oil							
5A	220	UST 295	1,000-gal Diesel							
5A	221	UST 296	6,000-gal Diesel							
4A	222	UST 306	500-gal Diesel							
4B	223	UST 317	275-gal Fuel Oil							
4B	224	UST 318	275-gal Fuel Oil							

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Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
4B	225	UST 319	275-gal Fuel Oil							
4B	226	UST 321	1,000-gal Diesel							
1C	227	UST 327	2,600-gal Diesel							
1C	228	UST 328	2,600-gal Diesel							
1C	229	UST 329	3,100-gal Diesel							
4A	230	UST 335	4,000-gal Fuel Oil							
1D	231	UST 351	500-gal Fuel Oil							
1G	232	UST 365	2,500-gal Diesel							
1G	233	UST 366	2,500-gal Diesel							
1G	234	UST 367	2,500-gal Diesel							
4A	235	UST 368	2,000-gal Diesel							
4A	236	UST 369	4,000-gal Diesel							
1D	237	UST 375	10,000-gal Fuel Oil							
5A	238	UST 398	108,000-gal JP-5							Ongoing investigation and remediation
5A	239	UST 399	500-gal Diesel							SWMU/AOC 285
5A	240	UST 404	500-gal Diesel							
3A	241	UST 405	1,200-gal Diesel							
3A	242	UST 406	1,200-gal Diesel							
5A	243	UST 435	1,000-gal Diesel							
3A	244	UST 442	110-gal Fuel Oil							
1G	245	UST 443	1,000-gal Diesel							
1G	246	UST 449	3,000-gal Fuel Oil							
1G	247	UST 450	3,000-gal Diesel							
1G	248	UST 451	3,000-gal Diesel							
1G	249	UST 452	3,000-gal Diesel							
3A	250	UST 453	1,500-gal Diesel							
3A	251	UST 454	1,500-gal Diesel							

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Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
3A	252	UST 455	1,500-gal Diesel							
3A	253	UST 457	2,000-gal Diesel							
5A	254	UST 461	550-gal Diesel							SWMU/AOC 137
5A	255	UST 462	550-gal Diesel							SWMU/AOC 139
3A	256	UST 463	1,500-gal Diesel							SWMU/AOC 249
NL	257	UST 493	1,500-gal Diesel							SWMU/AOC 143
4A	258	UST 529	25,000-gal Waste Oil							SWMU/AOC 145
2D	259	UST 547	567,000-gal JP-5							
2D	260	UST 548	567,000-gal JP-5							
2D	261	UST 549	567,000-gal JP-5							
2D	262	UST 550	567,000-gal JP-5							
2D	263	UST 551	567,000-gal JP-5							
2D	264	UST 553	10,000-gal Kerosene							
2D	265	UST 554	10,000-gal Gasoline							
5C	266	UST 568	500-gal Diesel							
5A	267	UST 574	25,000-gal JP-5							
5A	268	UST 575	25,000-gal JP-5							
5A	269	UST 576	25,000-gal JP-5							
5A	270	UST 577	25,000-gal JP-5							
3F	271	UST 579	320-gal Unknown Contents							
2B	272	UST 581	550-gal Diesel							
2A	273	UST 610	300-gal Gasoline							
3F	274	UST 619	Unknown Size - Diesel							
1B	275	UST 625	500-gal Waste Oil							SWMU/AOC 156
3F	276	UST 627	Unknown Size - Diesel							
2A	277	UST 634	10,000-gal Fuel Oil							
3A	278	UST 636	500-gal Diesel							
4A	279	UST 655	2,000-gal Diesel							SWMU/AOC 250
1G	280	UST 662	10,000-gal Fuel Oil							

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Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
4A	281	UST 672	500-gal Waste JP-5							SWMU/AOC 174
NL	282	UST 706	100-gal Diesel							SWMU/AOC 191
1B	283	UST 718	4,000-gal Fuel Oil							
1A	284	UST 730	1,000-gal Diesel							
3F	285	UST 782	Unknown Size - Unknown Contents							
1A	286	UST 797	10,000-gal Aviation Gas							
1D	287	UST 5101	500-gal Diesel							
1D	288	UST 5102	500-gal Fuel Oil							
2B	289	UST 5201	300-gal Fuel Oil							
2B	290	UST 5202	300-gal Diesel							
2B	291	UST 5203	300-gal Diesel							
2B	292	UST 5204	300-gal Diesel							
2B	293	UST 5205	300-gal Diesel							
2B	294	UST 5206	300-gal Diesel							
2B	295	UST 5207	300-gal Diesel							
2B	296	UST 5208	300-gal Diesel							
2B	297	UST 5209	300-gal Diesel							
2B	298	UST 5210	300-gal Diesel							
2B	299	UST 5211	300-gal Diesel							
2C	300	UST 5212	300-gal Diesel							
2C	301	UST 5213	300-gal Diesel							
2C	302	UST 5214	300-gal Diesel							
2C	303	UST 5215	300-gal Diesel							
2C	304	UST 5216	300-gal Diesel							
2C	305	UST 5217	300-gal Diesel							
2C	306	UST 5218	300-gal Diesel							
2C	307	UST 5219	300-gal Diesel							
2C	308	UST 5220	300-gal Diesel							
2C	309	UST 5221	300-gal Diesel							

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Site Summary
MCAS El Toro BCP - March 1995**

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
2B	310	UST 5222	300-gal Diesel							
2B	311	UST 5223	300-gal Diesel							
2B	312	UST 5224	300-gal Diesel							
2B	313	UST 5225	300-gal Diesel							
2B	314	UST 5226	300-gal Diesel							
2B	315	UST 5227	300-gal Diesel							
2B	316	UST 5228	300-gal Diesel							
2B	317	UST 5229	300-gal Diesel							
2B	318	UST 5230	300-gal Diesel							
2B	319	UST 5231	300-gal Diesel							
2B	320	UST 5232	300-gal Diesel							
2B	321	UST 5233	300-gal Diesel							
2B	322	UST 5234	300-gal Diesel							
2B	323	UST 5235	300-gal Diesel							
2B	324	UST 5236	300-gal Diesel							
2B	325	UST 5237	300-gal Diesel							
2C	326	UST 5238	300-gal Diesel							
2C	327	UST 5239	300-gal Diesel							
2C	328	UST 5240	300-gal Diesel							
2B	329	UST 5241	300-gal Diesel							
2B	330	UST 5242	300-gal Diesel							
NL	331	UST 5243	300-gal Diesel							
2A	332	UST 105A	1,000-gal Fuel Oil							
2A	333	UST 105B	500-gal Diesel							
5A	334	UST 114A	1,500-gal Fuel Oil							
5A	335	UST 114B	560-gal Diesel							
5A	336	UST 115A	650-gal Fuel Oil							
5A	337	UST 115B	560-gal Fuel Oil							
2A	338	UST 130A	1,500-gal Diesel							

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Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
2A	339	UST 130B	1,500-gal Diesel							
1C	340	UST 1A	500-gal Diesel							
1C	341	UST 1B	500-gal Diesel							
1A	342	UST 240A	8,000-gal Aviation Gas							
1A	343	UST 240B	185-gal Waste Oil							SWMU/AOC 65
1B	344	UST 262A	2,600-gal Diesel							
1B	345	UST 262B	2,600-gal Diesel							
1B	346	UST 271A	1,500-gal Fuel Oil							
1B	347	UST 271B	1,500-gal Fuel Oil							
1B	348	UST 271C	650-gal Fuel Oil							
1B	349	UST 271D	650-gal Fuel Oil							
1B	350	UST 278A	1,500-gal Fuel Oil							
1B	351	UST 278B	1,500-gal Fuel Oil							
5A	352	UST 297A	6,000-gal Diesel							
5A	353	UST 297C	185-gal Waste Oil							SWMU/AOC 77
4A	354	UST 298A	3,000-gal Unknown Contents							
4A	355	UST 298B	2,000-gal Diesel							
4A	356	UST 298D	185-gal Waste Oil							SWMU/AOC 85
4A	357	UST 304A	1,500-gal Fuel Oil							
4A	358	UST 304B	1,400-gal Fuel Oil							
4A	359	UST 314A	50,000-gal Waste Oil							SWMU/AOC 91
4A	360	UST 314B	50,000-gal Waste Oil							SWMU/AOC 92
4B	361	UST 322B	530-gal Diesel							SWMU/AOC 282
4A	362	UST 324A	8,000-gal JP-5							
4A	363	UST 324B	8,000-gal JP-5							
4A	364	UST 324C	8,000-gal JP-5							
4A	365	UST 324D	8,000-gal JP-5							
4A	366	UST 324E	2,000-gal Diesel							
4A	367	UST 326A	1,700-gal JP-5							

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Site Summary
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Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
4A	368	UST 326B	Unknown Size - JP-5							SWMU/AOC 283
1B	369	UST 337A	2,600-gal Fuel Oil							
1B	370	UST 337B	2,600-gal Fuel Oil							
1B	371	UST 347A	5,000-gal Gasoline							
1B	372	UST 347B	7,500-gal Gasoline							
1B	373	UST 347C	10,000-gal Gasoline							
1B	374	UST 347D	300-gal Waste Oil							SWMU/AOC 284
4B	375	UST 359A	1,000-gal Diesel							SWMU/AOC 303
4B	376	UST 359C	500-gal Waste from TCE Degreaser							SWMU/AOC 102
1G	377	UST 364A	2,000-gal Fuel Oil							
1G	378	UST 364B	5,300-gal Fuel Oil							
5A	379	UST 372A	1,000-gal Diesel							
5A	380	UST 372B	2,500-gal Diesel							
3A	381	UST 374A	42,000-gal Diesel							SWMU/AOC 263
3A	382	UST 374B	10,000-gal Diesel							
2A	383	UST 380A	10,500-gal Diesel							
2A	384	UST 380B	600-gal Motor Gas							
4A	385	UST 386A	1,000-gal Diesel							
4A	386	UST 386C	185-gal Waste Oil							SWMU/AOC 113
4A	387	UST 388A	500-gal Diesel							
4A	388	UST 388B	2,000-gal Diesel							SWMU/AOC 117
3A	389	UST 390A	550-gal Diesel							
3A	390	UST 390B	2,000-gal Diesel							
2A	391	UST 392A	550-gal Diesel							SWMU/AOC 298
2A	392	UST 392B	2,000-gal Diesel							
2A	393	UST 392C	Unknown Size - Diesel							
5A	394	UST 414A	30,000-gal JP-5							
5A	395	UST 414B	30,000-gal JP-5							
5A	396	UST 414C	2,500-gal JP-5							SWMU/AOC 20

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Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1G	397	UST 439A	5,000-gal Fuel Oil							
1G	398	UST 439B	5,000-gal Fuel Oil							
4A	399	UST 445A	10,000-gal Unknown Contents							
4A	400	UST 445B	10,000-gal JP-5							
4A	401	UST 445C	100-gal Waste Oil							SWMU/AOC 129
3A	402	UST 447A	10,000-gal JP-5							
3A	403	UST 447B	10,000-gal JP-5							
NL	404	UST 473A	1,500-gal Diesel							
NL	405	UST 473B	1,500-gal Diesel							
1D	406	UST 47A	1,500-gal Diesel							
1D	407	UST 47B	1,500-gal Diesel							
1D	408	UST 47C	500-gal Fuel Oil							
1C	409	UST 54A	500-gal Diesel							
1C	410	UST 54B	500-gal Diesel							
NL	411	UST 55A	5,000-gal Unknown Contents							
NL	412	UST 55B	5,000-gal Unknown Contents							
1C	413	UST 56A	1,400-gal Diesel							
1C	414	UST 56B	1,400-gal Fuel Oil							
1C	415	UST 56C	500-gal Diesel							
5A	416	UST 605A	1,700-gal Diesel							
5A	417	UST 605B	500-gal Diesel							
5A	418	UST 606A	1,700-gal Diesel							
5A	419	UST 606B	500-gal Diesel							
2A	420	UST 637-1	12,000-gal Leaded Gasoline							
2A	421	UST 637-2	12,000-gal Premium Gas							
2A	422	UST 637-3	12,000-gal Unknown Contents							
1B	423	UST 63A	500-gal Diesel							
1B	424	UST 63B	500-gal Diesel							
5A	425	UST 643A	185-gal Waste Oil							SWMU/AOC 162

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Site Summary
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Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1G	426	UST 651-1	12,000-gal Unknown Contents							
1G	427	UST 651-2	12,000-gal Unknown Contents							
1G	428	UST 651-3	12,000-gal Unknown Contents							
1G	429	UST 651-4	12,000-gal Unknown Contents							
1G	430	UST 651-5	500-gal Waste Oil							SWMU/AOC 166
1G	431	UST 651-6	500-gal Waste Oil							SWMU/AOC 167
1G	432	UST 651-7	500-gal Waste Oil							SWMU/AOC 168
2A	433	UST 658A	10,000-gal JP-5							
2A	434	UST 658B	10,000-gal JP-5							
1C	435	UST 65A	1,000-gal Fuel Oil							
1C	436	UST 65B	2,000-gal Fuel Oil							
1B	437	UST 66A	1,100-gal Diesel							
1B	438	UST 66B	1,500-gal Diesel							
4A	439	UST 672B	1,000-gal Waste Oil							SWMU/AOC 176
3A	440	UST 673B	300-gal Waste Oil							SWMU/AOC 180
4B	441	UST 674A	500-gal Waste Oil							SWMU/AOC 187
4B	442	UST 675A	500-gal Waste Oil							SWMU/AOC 188
1B	443	UST 67A	1,500-gal Fuel Oil							
1B	444	UST 67B	1,500-gal Fuel Oil							
1G	445	UST 693A	500-gal Diesel							
1G	446	UST 693B	500-gal Diesel							
5A	447	UST 6A	1,000-gal Fuel Oil							
5A	448	UST 6B	500-gal Fuel Oil							
5A	449	UST 716A	3,000-gal Waste Oil							SWMU/AOC 192
NL	450	UST 724A	1,000-gal Diesel							
1G	451	UST 733A	10,000-gal Diesel							
1G	452	UST 733B	10,000-gal Diesel							SWMU/AOC 286
1G	453	UST 733C	10,000-gal Diesel							SWMU/AOC 287
4A	454	UST 758B	185-gal Waste Oil							SWMU/AOC 197

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Site Summary
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Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
4A	455	UST 759B	185-gal Waste Oil							SWMU/AOC 200
1B	456	UST 75A	500-gal Diesel							
1B	457	UST 75B	500-gal Diesel							
1B	458	UST 75C	500-gal Diesel							
4A	459	UST 760A	185-gal Waste Oil							SWMU/AOC 202
5A	460	UST 761B	185-gal Waste Oil							SWMU/AOC 206
3A	461	UST 762B	185-gal Waste Oil							SWMU/AOC 209
5A	462	UST 763B	185-gal Waste Oil							SWMU/AOC 212
2A	463	UST 764A	185-gal Waste Oil							SWMU/AOC 214
1A	464	UST 765A	185-gal Waste Oil							SWMU/AOC 217
1A	465	UST 766B	185-gal Waste Oil							SWMU/AOC 221
4B	466	UST 800A	10,000-gal Diesel							
4B	467	UST 800B	10,000-gal Kerosene							
4B	468	UST 800C	10,000-gal Diesel							
4B	469	UST 800D	1,000-gal Waste Oil							SWMU/AOC 230
4B	470	UST 800E	1,000-gal Waste Oil							SWMU/AOC 231
1B	471	UST 83A	1,500-gal Fuel Oil							
1B	472	UST 83B	1,500-gal Fuel Oil							
1B	473	UST 84A	1,500-gal Diesel							
1B	474	UST 84B	1,500-gal Fuel Oil							
5A	475	UST 850A	5,000-gal JP-5							SWMU/AOC 288
5A	476	UST 850B	5,000-gal JP-5							SWMU/AOC 289
5A	477	UST 850C	500-gal JP-5							SWMU/AOC 290
5A	478	UST 902A	50,000-gal JP-5							
5A	479	UST 902B	50,000-gal JP-5							
5A	480	UST 902C	2,500-gal JP-5							
1B	481	UST 98A	1,500-gal Fuel Oil							
1B	482	UST 98B	500-gal Diesel							
2D	483	UST T-1	2,000-gal Waste JP-5							SWMU/AOC 23

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Site Summary
MCAS El Toro BCP - March 1995**

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
5A	484	UST T-10	1,000-gal JP-5							SWMU/AOC 108
5A	485	UST T-11	1,000-gal JP-5							SWMU/AOC 75
5A	486	UST T-2	2,000-gal Waste JP-5							SWMU/AOC 18
2A	487	UST T-3	2,000-gal Waste JP-5							SWMU/AOC 19
1A	488	UST T-4	2,000-gal Waste Oil							SWMU/AOC 58
1A	489	UST T-5	2,000-gal Waste JP-5							SWMU/AOC 17
2A	490	UST T-6	2,000-gal Aviation Gas							SWMU/AOC 21
5A	491	UST T-7	2,000-gal Waste JP-5							SWMU/AOC 24
2A	492	UST T-8	2,000-gal Waste JP-5							SWMU/AOC 22
5A	493	UST T-9	2,000-gal JP-5							SWMU/AOC 228
2A	494	AST 126	300-gal 10:10 Oil							
5A	495	AST 155	200-gal Lube Oil							
1A	496	AST 245	1,000-gal Liquid Propane Gas							
4B	497	AST 626	1,000-gal Waste Oil							
3A	498	AST 637	500-gal Propane							
3A	499	AST 651	1,000-gal Propane							
1B	500	AST 670	Unknown Size - Liquid Propane Gas							
2A	501	AST 717	500-gal Diesel							
1G	502	AST 753	200-gal Pesticides							
1G	503	AST 797	1,000-gal Waste Oil							
5A	504	AST 862	30,000-gal JP-5							
4A	505	AST 317C1	5,000-gal Diesel							
5A	506	AST 390A	500-gal Unleaded Gasoline							
4B	507	AST 390B	500-gal Diesel							
4A	508	OWS 96	OWS 96							SWMU/AOC 291
1A	509	OWS 240C	OWS 240C							SWMU/AOC 66
5A	510	OWS 244	OWS 244							SWMU/AOC 68
1B	511	OWS 280A	OWS 280A							
5A	512	OWS 297B	OWS 297B							SWMU/AOC 76

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Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
4A	513	OWS 298C	OWS 298C							SWMU/AOC 84
4A	514	OWS 312	OWS 312							
4A	515	OWS 314C	OWS 314C							
4A	516	OWS 324-1	OWS 324-1							
4A	517	OWS 324-2	OWS 324-2							
4A	518	OWS 357	OWS 357							SWMU/AOC 296
4B	519	OWS 359B	OWS 359B							SWMU/AOC 101
3A	520	OWS 371	OWS 371							
4A	521	OWS 386B	OWS 386B							SWMU/AOC 112
4A	522	OWS 388C	OWS 388C							SWMU/AOC 118
1G	523	OWS 439	OWS 439							
4A	524	OWS 445	OWS 445							
5A	525	OWS 447C	OWS 447C							SWMU/AOC 132
5A	526	OWS 461A	OWS 461A							
5A	527	OWS 462A	OWS 462							
2A	528	OWS 602	OWS 602							SWMU/AOC 148
5A	529	OWS 605C	OWS 605C							SWMU/AOC 151
5A	530	OWS 606C	OWS 606C							SWMU/AOC 154
1B	531	OWS 626-1	OWS 626-1							SWMU/AOC 159
1B	532	OWS 626-2	OWS 626-2							
1B	533	OWS 626-3	OWS 626-3							
1B	534	OWS 626-4	OWS 626-4							
5A	535	OWS 643B	OWS 643B							SWMU/AOC 163
1G	536	OWS 651-8	OWS 651-8							SWMU/AOC 169
2A	537	OWS 658C	OWS 658C							
4A	538	OWS 671	OWS 671							SWMU/AOC 173
4A	539	OWS 672A	OWS 672A							SWMU/AOC 175
3A	540	OWS 673A	OWS 673A							SWMU/AOC 179
4B	541	OWS 674	OWS 674							SWMU/AOC 189

Table 3-1a
Site Summary
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Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
4B	542	OWS 675B	OWS 675B							SWMU/AOC 292
2B	543	OWS 676	OWS 676							SWMU/AOC 189
5A	544	OWS 696	OWS 696							SWMU/AOC 163
5A	545	OWS 716B	OWS 716B							SWMU/AOC 193
1G	546	OWS 744	OWS 744							
4A	547	OWS 758A	OWS 758A							SWMU/AOC 196
4A	548	OWS 759A	OWS 759A							SWMU/AOC 199
4A	549	OWS 760B	OWS 760B							SWMU/AOC 203
5A	550	OWS 761A	OWS 761A							SWMU/AOC 205
3A	551	OWS 762A	OWS 762A							SWMU/AOC 208
5A	552	OWS 763A	OWS 763A							SWMU/AOC 211
2A	553	OWS 764B	OWS 764B							SWMU/AOC 215
1A	554	OWS 765B	OWS 765B							SWMU/AOC 218
1A	555	OWS 766A	OWS 766A							SWMU/AOC 220
4B	556	OWS 800F	OWS 800F							SWMU/AOC 232
4B	557	OWS 802	OWS 802							
3F	558	OWS 817	OWS 817							SWMU/AOC 233
5A	559	OWS 845	OWS 845							SWMU/AOC 248
5A	560	OWS 850	OWS 850							
5A	561	OWS 892	OWS 892							
5A	562	OWS 896	OWS 896							
5A	563	OWS 897	OWS 897							
1B	564	OWS 1702	OWS 1702							
5A	565	PCB T1	Transformer - F503496-65P, Pad 1311-Bldg. 6						X	
1A	566	PCB T2	Transformer-5KL505, Bldg. 12						X	
1A	567	PCB T3	Transformer-13F0660, Pole 507B-Bldg. 19						X	
1D	568	PCB T4	Transformer-NA, Pole 599-Bldg. 35						X	
1C	569	PCB T5	Transformer-23971, Pole 157-Bldg. 58						X	
1C	570	PCB T6	Transformer-6954405, Pad 142-Bldg. 59						X	

Table 3-1a
Site Summary
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Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1C	571	PCB T7	Transformer-6954539, Pad 142-Bldg. 59						X	
1C	572	PCB T8	Transformer-6956179, Pad 142-Bldg. 59						X	
1C	573	PCB T9	Transformer-7092522, Pole 80-Bldg. 60						X	
1C	574	PCB T10	Transformer-645B17826, Pole 654-Bldg. 65						X	
1C	575	PCB T11	Transformer-645B17827, Pole 654-Bldg. 65						X	
1C	576	PCB T12	Transformer-645B17855, Pole 654-Bldg. 65						X	
2A	577	PCB T13	Transformer-7093890, Pole 904-Bldg. 105						X	
5A	578	PCB T14	Transformer-177072, Pad 412-Bldg. 114						X	
5A	579	PCB T15	Transformer-177071, Pad 4112-Bldg. 115						X	
2A	580	PCB T16	Transformer-681549, Pole 812-Bldg. 118						X	
2A	581	PCB T17	Transformer-7093966, Pole 823A-Bldg. 120						X	
2A	582	PCB T18	Transformer-7092506P, Pole 823A-Bldg. 120						X	
2A	583	PCB T19	Transformer-7093966P, Pole 823A-Bldg. 120						X	
2A	584	PCB T20	Transformer-53233, Pad 4111-Bldg. 125						X	
2A	585	PCB T21	Transformer-6160963, Pad 4111-Bldg. 125						X	
2A	586	PCB T22	Transformer-7092697, Pole 871-Bldg. 129						X	
2A	587	PCB T23	Transformer-7092974, Pole 871-Bldg. 129						X	
2A	588	PCB T24	Transformer-7093975, Pole 871-Bldg. 129						X	
3A	589	PCB T25	Transformer-14346-1, NA-Bldg. 165						X	
2A	590	PCB T26	Transformer-5638241, Pole 802-Bldg. 203						X	
2A	591	PCB T27	Transformer-6455115, Pole 802-Bldg. 203						X	
1D	592	PCB T28	Transformer-6687930, NA-Bldg. 248						X	
1D	593	PCB T29	Transformer-66F2983, Bldg. 248						X	
1D	594	PCB T30	Transformer-66F3028, Bldg. 248						X	
1D	595	PCB T31	Transformer-66K117, Bldg. 248						X	
1D	596	PCB T32	Transformer-66K154, Bldg. 248						X	
1F	597	PCB T33	Transformer-NA, Bldg. 248						X	
1B	598	PCB T34	Transformer-9750379, Pad 143-Bldg. 264						X	
1B	599	PCB T35	Transformer-9750997, Pad 143-Bldg. 264						X	

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1B	600	PCB T36	Transformer-3700258, Pad 138-Bldg. 272						X	
1B	601	PCB T37	Transformer-6962781, Pad 138-Bldg. 272						X	
1B	602	PCB T38	Transformer-7093990, Pad 138-Bldg. 272						X	
1B	603	PCB T39	Transformer-7093256, Pad 128-Bldg. 281						X	
1B	604	PCB T40	Transformer-7093261, Pad 128-Bldg. 281						X	
1B	605	PCB T41	Transformer-7220136, Pad 128-Bldg. 281						X	
1B	606	PCB T42	Transformer-6224013, Pad 141-Bldg. 285						X	
1B	607	PCB T43	Transformer-7093682, Pad 141-Bldg. 285						X	
1B	608	PCB T44	Transformer-7220241, Pad 141-Bldg. 285						X	
4A	609	PCB T45	Transformer-B58240, Pad 263-Bldg. 311						X	
1C	610	PCB T46	Transformer-72535, Pole 73-Bldg. 327						X	
1C	611	PCB T47	Transformer-6587555, Pole 74-Bldg. 327						X	
1C	612	PCB T48	Transformer-65875666, Pole 74-Bldg. 327						X	
4A	613	PCB T49	Transformer-1888163, Pad 254-Bldg. 335						X	
4B	614	PCB T50	Transformer-B335346, Pad 264-Bldg. 359						X	
4B	615	PCB T51	Transformer-B335627, Pad 269-Bldg. 360						X	
1G	616	PCB T52	Transformer-62194, Pad 162-Bldg. 365						X	
4A	617	PCB T53	Transformer-62220, Pad 259-Bldg. 368						X	
4A	618	PCB T54	Transformer-62221, Pad 2510-Bldg. 369						X	
4A	619	PCB T55	Transformer-62222, Pad 2511-Bldg. 370						X	
5A	620	PCB T56	Transformer-10097-1, Pad 335-Bldg. 371							Leak needs evaluated
5A	621	PCB T57	Transformer-10098-1, Pad 335-Bldg. 371						X	
5A	622	PCB T58	Transformer-14538, Pad 425-Bldg. 372						X	
3A	623	PCB T59	Transformer-14440, Pad 321-Bldg. 374						X	
5A	624	PCB T60	Transformer-06577-1, Bldg. 378						X	
4A	625	PCB T61	Transformer-B684198, Pad SS-2-Bldg. 383						X	
4A	626	PCB T62	Transformer-4418, Pad 257-Bldg. 386						X	
3A	627	PCB T63	Transformer-9908129, Pad 316-Bldg. 406						X	

Table 3-1a
Site Summary
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Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1F	628	PCB T64	Transformer-NA , Pole 248-Bldg. 410						X	
1F	629	PCB T65	Transformer-NA, Pole 248-Bldg. 410						X	
2B	630	PCB T66	Transformer-C379541, Pad 404-Bldg. 415						X	
1G	631	PCB T67	Transformer-C-861785, Pad 111-Bldg. 439						X	
4A	632	PCB T68	Transformer-C861997A, Pad 256-Bldg. 445						X	
3A	633	PCB T69	Transformer-C861997B, Pad 331-Bldg. 447						X	
1G	634	PCB T70	Transformer-7371282, Pad 165-Bldg. 449						X	
1G	635	PCB T71	Transformer-7371279, Pad 166-Bldg. 450						X	
1G	636	PCB T72	Transformer-7371281, Pad 167-Bldg. 451						X	
1G	637	PCB T73	Transformer-7371280, Pad 168-Bldg. 452						X	
3A	638	PCB T74	Transformer-C-862139, Pad 327-Bldg. 457							SWMU/AOC 244
3F	639	PCB T75	Transformer-Missing, Pad 318-Bldg. 458						X	
3F	640	PCB T76	Transformer-9845884, Pad 311-Bldg. 460						X	
3F	641	PCB T77	Transformer-D317654, Pad 311-Bldg. 460						X	
3F	642	PCB T78	Transformer-J929874T71AA, Pad 319-Bldg. 464						X	
5A	643	PCB T79	Transformer-151103, Pad 251-Bldg. 482						X	
2C	644	PCB T80	Transformer-B336887, Pad 401- Bldg. 582						X	
5A	645	PCB T81	Transformer-F-6947158, Pad 4114-Bldg. 605						X	
5A	646	PCB T82	Transformer-E-694715A, Pad 4113-Bldg. 606						X	
1C	647	PCB T83	Transformer-NA , Pole 166A-Bldg. 630						X	
4A	648	PCB T84	Transformer-10096-1, Pad 215-Bldg. 631						X	
2A	649	PCB T85	Transformer-PAV 1646-01, Pad 431-Bldg. 634						X	
2A	650	PCB T86	Transformer-YAP-70141, Pad 431-Bldg. 634						X	
3A	651	PCB T87	Transformer-10832-1, Pad 323-Bldg. 636						X	
4A	652	PCB T88	Transformer-12945-1, Pad 2513-Bldg. 655						X	
2A	653	PCB T89	Transformer-C173562, Pad 414-Bldg. 658						X	
4A	654	PCB T90	Transformer-II344577P73AA, Pad 216-Bldg. 617						X	
1D	655	PCB T91	Transformer-786787895, Pole 648-Bldg. 692						X	
1D	656	PCB T92	Transformer-786787910, Pole 648-Bldg. 692						X	

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Site Summary
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Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1D	657	PCB T93	Transformer-786787919, Pole 648-Bldg. 692						X	
5A	658	PCB T94	Transformer-Westinghouse, Bldg. 716						X	
NA	659	PCB T95	Transformer-959077, Bldg. 1765						X	
2A	660	PCB T96	Transformer-5635257, Pole 917-Bldg. 5014						X	
2B	661	PCB T97	Transformer-6963930P, Pole 942-Bldg. 5201						X	
2C	662	PCB T98	Transformer-6969510, Pole 946-Bldg. 5240						X	
1D	663	PCB T99	Transformer-7794141, Pole 666-Bldg. 5417						X	
1D	664	PCB T100	Transformer-7794142, Pole 666-Bldg. 5417						X	
1D	665	PCB T101	Transformer-7794143, Pole 666-Bldg. 5417						X	
2C	666	PCB T102	Transformer-69680882, Pole 952A-Bldg. 5125						X	
1D	667	PCB T103	Transformer-793397, Pole 687-Bldg. 687						X	
1D	668	PCB T104	Transformer-794144, Pole 687-Bldg. 687						X	
1D	669	PCB T105	Transformer-6900519, Pole 687-Bldg. 687						X	
5A	670	PCB T106	Transformer-6833177, Pad 215-Gate 9						X	
NA	671	PCB T107	Transformer-66F2984						X	
1F	672	PCB T108	Transformer-NA, Pole 251						X	
2A	673	PCB T109	Transformer-NA, Pole 852-Tank Farm 6						X	
1B	674	PCB T110	Transformer-70609-Bldg. 271							
1B	675	PCB T111	Transformer-70465-Bldg. 271							
1B	676	PCB T112	Transformer-704464-Bldg. 271							
1B	677	PCB T113	Transformer-8335541-Bldg. 833							
1B	678	PCB T114	Transformer-8335544-Bldg. 833							
1B	679	PCB T115	Transformer-8335543-Bldg. 833							
4A	680	PCB A1	Transformer storage area near water tank 175							
4A	681	PCB A2	PCB equipment storage area near Bldg. 324							
3F	682	RFA 1	Former Scrap Metal Yard Near Golf Course						X	
3F	683	RFA 2	Vegetation Piles Near Golf Course						X	
5A	684	RFA 6	Landfarming Site NW of Bee Canyon Wash						X	
4B	685	RFA 7	Transformer Storage Area East of Bee Canyon							

Table 3-1a
Site Summary
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Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
2F	686	RFA 8	Abandoned Well 50-3285 West of Bldg. 809						X	
5A	687	RFA 9	Fuel Bladder East of Agua Chion Wash							
NA	688	RFA 12	Active Sanitary Sewer Lines (4)						X	
2A	689	RFA 13	Drop Tank Storage Area SW of Bldgs. 114 /115						X	
5A	690	RFA 14	Drop Tank Fuel Storage Area NW of Bldg. 605							
5A	691	RFA 15	Wash Water Runoff Site SW of Fuel Station 576						X	
5A	692	RFA 16	Wash Water Runoff Site NW of Fuel Station 574						X	
5A	693	RFA 28	Fuel Spill Site						X	
2A	694	RFA 41	Vehicle Wash Rack-Bldg. 127						X	
3A	695	RFA 46	Equipment Storage Yard-Bldg. 163							
5A	696	RFA 74	Aircraft Wash Area-Bldg. 297						X	
4A	697	RFA 95	Engine Test Cell-Bldg. 324						X	
4B	698	RFA 98	Vehicle Wash Rack-Bldg. 359						X	
4B	699	RFA 100	TCE Degreaser-Bldg. 359						X	
4A	700	RFA 110	Vehicle Wash Rack-Bldg. 386							
3A	701	RFA 120	Vehicle Wash Rack-Bldg. 390						X	
2B	702	RFA 125	< 90-day accumulation area-Bldg. 415						X	
4A	703	RFA 128	Storage Area-Bldg. 445						X	
3A	704	RFA 131	Engine Test Cell-Bldg. 447							
5A	705	RFA 136	Aircraft Wash Area-Bldg. 461						X	
5A	706	RFA 141	Aircraft Wash Area-Bldg. 463						X	
5A	707	RFA 150	Aircraft Wash Area-Bldg. 605						X	
5A	708	RFA 152	Aircraft Wash Area-Bldg. 606						X	
1G	709	RFA 164	Vehicle Wash Rack-Bldg. 651						X	
3A	710	RFA 178	Vehicle Wash Rack-Bldg. 673						X	
3B	711	RFA 181	Landfarming Area-Bldg. 673						X	
4A	712	RFA 195	Vehicle Wash Rack-Bldg. 758						X	
4A	713	RFA 198	Vehicle Wash Rack-Bldg. 759							
4A	714	RFA 201	Vehicle Wash Rack-Bldg. 760							

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
5A	715	RFA 204	Vehicle Wash Rack-Bldg. 761							
5A	716	RFA 210	Vehicle Wash Rack-Bldg. 763						X	
2A	717	RFA 213	Vehicle Wash Rack-Bldg. 764							
1A	718	RFA 216	Vehicle Wash Rack-Bldg. 765						X	
1A	719	RFA 219	Vehicle Wash Rack-Bldg. 766						X	
4A	720	RFA 243	Wash Rack-Bldg. 96						X	
3F	721	RFA 245	Golf Course-Bldg. 464						X	
3F	722	RFA 246	Golf Course Irrigation Tank-Bldg. 459						X	
NA	723	RFA 247	Water Irrigation Pipeline in SW and SE quadrants						X	
4B	724	RFA 253	Wash Rack-Bldg. 317						X	
5A	725	RFA 257	Wash Water Runoff Site-Bldg. 575						X	
5A	726	RFA 258	Wash Water Runoff Site-Bldg. 577						X	
3A	727	RFA 260	Above Ground Storage Tank-Bldg. 389							
3A	728	RFA 262	Fuel Storage Area-Bldg. 390						X	
3B	729	RFA 264	Equipment Storage Yard DRMO Lot #3							
5A	730	RFA 267	Drop Tank Fuel Storage Area-Bldg. 605						X	
1A	731	RFA 268	Vehicle Wash Rack-Bldg. 240						X	
3F	732	RFA 270	Wash Rack-Bldg. 817						X	
1D	733	RFA 273	Wash Rack-Bldg. 31						X	
1D	734	RFA 274	Stockpiled Soil-Bldg. 31						X	
2A	735	RFA 293	Cleaning Tank-Bldg. 130						X	
5A	736	RFA 297	Former Asphalt Batch Plant NE of Golf Course						X	
4B	737	RFA 299	Washrack-Bldg. 800						X	
5A	738	RFA 301	Mark Arrest System East side of Runway 34R						X	
5A	739	RFA 302	Mark Arrest System West side Runway 34R						X	
4B	740	RFA 304	Trenches Inside Bldg. 359						X	
5C	741	RFA 305	Septic Tank-Bldg. 601						X	
1F	742	RFA 306	Septic Tank-Bldg. 687						X	
1F	743	RFA 307	Septic Tank-Bldg. 819						X	

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1A	744	SAA 2	< 90-day accumulation area - Hanger 2							
5A	745	SAA 5A	< 90-day accumulation area-Bldg. 5							SWMU/AOC 25
1A	746	SAA 5B	< 90-day accumulation area-Bldg. 5							SWMU/AOC 26
5A	747	SAA 7	< 90-day accumulation area-Bldg. 7							
1A	748	SAA 10	< 90-day accumulation area-Bldg. 10							SWMU/AOC 27
1A	749	SAA 19	< 90-day accumulation area-Bldg. 19							
1A	750	SAA 22	< 90-day accumulation area-Bldg. 22							
1D	751	SAA 29A	< 90-day accumulation area-Bldg. 29							SWMU/AOC 30
1D	752	SAA 29B	< 90-day accumulation area-Bldg. 29							SWMU/AOC 31
1D	753	SAA 31A	< 90-day accumulation area-Bldg. 31							SWMU/AOC 272
1D	754	SAA 31B	< 90-day accumulation area-Bldg. 31							
1D	755	SAA 51	< 90-day accumulation area-Bldg. 51							SWMU/AOC 33
1B	756	SAA 77	< 90-day accumulation area-Bldg. 77							
5A	757	SAA 114	< 90-day accumulation area-Bldg. 114							SWMU/AOC 38
5A	758	SAA 115	< 90-day accumulation area-Bldg. 115							SWMU/AOC 39
2A	759	SAA 130A	< 90-day accumulation area-Bldg. 130							SWMU/AOC 294
2A	760	SAA 130B	< 90-day accumulation area-Bldg. 130							SWMU/AOC 295
2A	761	SAA 130C	< 90-day accumulation area-Bldg. 130							SWMU/AOC 42
5A	762	SAA 155A	< 90-day accumulation area-Bldg. 155							SWMU/AOC 240
5A	763	SAA 155B	< 90-day accumulation area-Bldg. 155							SWMU/AOC 241
5A	764	SAA 155C	< 90-day accumulation area-Bldg. 155							SWMU/AOC 45
1A	765	SAA 240	< 90-day accumulation area-Bldg. 240							SWMU/AOC 64
1A	766	SAA 242	< 90-day accumulation area-Bldg. 242							SWMU/AOC 67
5A	767	SAA 289	< 90-day accumulation area-Bldg. 289							SWMU/AOC 70
5A	768	SAA 297	< 90-day accumulation area-Bldg. 297							SWMU/AOC 73
4A	769	SAA 298	< 90-day accumulation area-Bldg. 298							SWMU/AOC 83
4A	770	SAA 306	< 90-day accumulation area-Bldg. 306							SWMU/AOC 88
4A	771	SAA 307	< 90-day accumulation area-Bldg. 307							
4A	772	SAA 314	Fuel Storage Locker-Bldg. 314							SWMU/AOC 269

Table 3-1a
Site Summary
MCAS EI Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
4B	773	SAA 317	< 90-day accumulation area-Bldg. 317							SWMU/AOC 93
4A	774	SAA 357	< 90-day accumulation area -Bldg. 357							SWMU/AOC 97
4B	775	SAA 359A	< 90-day accumulation area-Bldg. 359							SWMU/AOC 254
4B	776	SAA 359B	< 90-day accumulation area-Bldg. 359							SWMU/AOC 99
4A	777	SAA 370	Hazardous Material Storage/ < 90-day							
5A	778	SAA 371A	< 90-day accumulation area-Bldg. 371							SWMU/AOC 107
5A	779	SAA 371B	< 90-day accumulation area-Bldg. 371							SWMU/AOC 242
4A	780	SAA 386	< 90-day accumulation area-Bldg. 386							SWMU/AOC 114
4A	781	SAA 388A	< 90-day accumulation area-Bldg. 388							SWMU/AOC 116
4A	782	SAA 388B	< 90-day accumulation area-Bldg. 388							SWMU/AOC 251
3A	783	SAA 389A	< 90-day accumulation area-Bldg. 389							SWMU/AOC 119
3A	784	SAA 389B	< 90-day accumulation area-Bldg. 389							SWMU/AOC 259
3A	785	SAA 390A	< 90-day accumulation area-Bldg. 390							SWMU/AOC 122
3A	786	SAA 390B	< 90-day accumulation area-Bldg. 390							SWMU/AOC 261
2A	787	SAA 392A	< 90-day accumulation area-Bldg. 392							SWMU/AOC 124
2A	788	SAA 392B	< 90-day accumulation area-Bldg. 392							SWMU/AOC 271
5A	789	SAA 398	< 90-day accumulation area-Bldg. 398							SWMU/AOC 252
3A	790	SAA 441	< 90-day accumulation area-Bldg. 441							SWMU/AOC 256
3A	791	SAA 442	< 90-day accumulation area-Bldg. 442							SWMU/AOC 126
4A	792	SAA 445	< 90-day accumulation area-Bldg. 445							SWMU/AOC 127
3A	793	SAA 447	< 90-day accumulation area-Bldg. 447							SWMU/AOC 130
3A	794	SAA 456	< 90-day accumulation area-Bldg. 456							SWMU/AOC 135
5A	795	SAA 461	< 90-day accumulation area-Bldg. 461							SWMU/AOC 138
5A	796	SAA 462	< 90-day accumulation area-Bldg. 462							SWMU/AOC 140
4A	797	SAA 529	< 90-day accumulation area-Bldg. 529							SWMU/AOC 144
4B	798	SAA 534	< 90-day accumulation area-Bldg. 534							SWMU/AOC 146
2A	799	SAA 602	< 90-day accumulation area-Bldg. 602							SWMU/AOC 147
5A	800	SAA 605	< 90-day accumulation area-Bldg. 605							SWMU/AOC 149
5A	801	SAA 606	< 90-day accumulation area-Bldg. 606							SWMU/AOC 255

Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1B	802	SAA 626	< 90-day accumulation area-Bldg. 626							
2A	803	SAA 634	< 90-day accumulation area-Bldg. 634							
3A	804	SAA 636	< 90-day accumulation area-Bldg. 636							SWMU/AOC 160
1G	805	SAA 651	< 90-day accumulation area-Bldg. 651							SWMU/AOC 165
2A	806	SAA 658	< 90-day accumulation area-Bldg. 658							SWMU/AOC 171
4A	807	SAA 671	< 90-day accumulation area-Bldg. 671							SWMU/AOC 172
4A	808	SAA 672	< 90-day accumulation area-Bldg. 672							SWMU/AOC 177
3A	809	SAA 673	< 90-day accumulation area-Bldg. 673							SWMU/AOC 186
1G	810	SAA 693	< 90-day accumulation area-Bldg. 693							
5A	811	SAA 698	< 90-day accumulation area-Bldg. 698							
1G	812	SAA 744	< 90-day accumulation area-Bldg. 744							
2A	813	SAA 746	< 90-day accumulation area-Bldg. 746							
2A	814	SAA 747	< 90-day accumulation area-Bldg. 747							
3A	815	SAA 761	< 90-day accumulation area-Bldg. 761							SWMU/AOC 236
3F	816	SAA 765	< 90-day accumulation area-Bldg. 765							SWMU/AOC 266
4A	817	SAA 769	< 90-day accumulation area-Bldg. 769							SWMU/AOC 222
4A	818	SAA 770	< 90-day accumulation area-Bldg. 770							SWMU/AOC 223
1D	819	SAA 771	< 90-day accumulation area-Bldg. 771							SWMU/AOC 224
3F	820	SAA 772	< 90-day accumulation area-Bldg. 772							SWMU/AOC 225
5A	821	SAA 778	< 90-day accumulation area-Bldg. 778							SWMU/AOC 226
5A	822	SAA 779	< 90-day accumulation area-Bldg. 779							SWMU/AOC 227
4B	823	SAA 800	< 90-day accumulation area-Bldg. 800							SWMU/AOC 229
3A	824	SAA 831	< 90-day accumulation area-Bldg. 831							
3A	825	SAA 856	< 90-day accumulation area-Bldg. 856							SWMU/AOC 234
2A	826	SAA 900	EO accumulation area-Bldg. 900							
3A	827	BLD 673	RCRA Storage Facility-Bldg. 673 T-3							
1G	828	SRU 1	Silver recovery unit at hospital/dental clinic							Site conditions unknown

**Table 3-1a
Site Summary
MCAS El Toro BCP - March 1995**

Parcel	Site No.	Database Tracking	Description	Material Disposed of	Date of Operation	Status	Risk to Human Health & the Environment*	Regulatory Mechanism	NFA	Comments
1G	829	SRU 2	Silver recovery unit at photo lab							Site conditions unknown
4A	830	SRU 3	Former photo lab silver recovery unit location							Site conditions unknown

Notes:

Note 1: This table does not include buildings with known asbestos.

* = The risk values were obtained from the Draft Phase II Work Plan prepared by Jacobs, November 1993.

- (1) LOC Reference represents a unique alpha-numeric code assigned to each LOC for reference purposes. The code consists of the LOC category and number (e.g., site, tank, SWMU/AOC number, etc.)
- (2) IRP Sites 3 and 4 were combined for the Phase II RI Work Plan, but have been divided.
- (3) IRP Site 18 is defined as groundwater only and does not include source areas.
- (4) IRP Site 23 was evaluated in the RCRA Facility Assessment as SWMU/AOC 12.
- (5) IRP Site 24 was identified in the Draft Phase II RI Work Plan and consists of most of the southwest quadrant of the Station. This area encompasses numerous LOCs; however, LOCs located within the Site 24 boundary are considered independently from IRP Site 24.

APHO = Aerial Photograph

AST = Aboveground Storage Tank

BLD = Building

IRP = Installation Restoration Program

MSC B = Miscellaneous LOC - Burn Pit

MSC P = Miscellaneous LOC - Pesticide Storage Area

NFA = No Further Action

OWS = Oil/Water Separator

PCB = Polychlorinated Biphenyl

PCB A = PCB Transformer Storage Area

PCB T = PCB Transformer

RFA = RCRA (Resource Conservation and Recovery Act) Facility Assessment

SAA = <90-day Accumulation Area

SAIC = Science Applications International Corporation (refers to features/anomalies identified in SAIC report)

SRU = Silver Recovery Unit

SWMU/AOC = Solid Waste Management Unit/Area of Concern

UST = Underground Storage Tank

Table 3-1b Aerial Photograph Features/Anomalies MCAS El Toro BCP - March 1995							
Database Tracking	SAIC Anomaly I.D. No.	BCP Parcel	Point of Reference	Year	SAIC Observations	SAIC Comments	Comments
APHO1	7	1A	Tank Farm 3	1946	ST	C	The stains appear adjacent to the southeastern side of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 113, 173, 190, 227, 235, and 272.
APHO2	14	2A	Bldg 136	1946	OS, D	C	Miscellaneous equipment is stored along the southeast side of Bldg. 135. The ground surface is asphalt paved and surface runoff flows in a southwest direction.
APHO3	21	2A	Bldg 120	1946	OS, D	C	Miscellaneous equipment is stored along the southeast side of Bldg. 120. The ground surface is asphalt paved and surface runoff flows in a southwest direction.
APHO4	22	2A	Tank Farm 4	1946	ST	C	Miscellaneous equipment is stored along all sides of this building. Portions of the ground surface along the east and west sides of the building are unpaved. Surface runoff flows in a southwesterly direction.
APHO5	25	1D	Bldg 50	1946	OS	C	This area is commonly used for open storage. The ground surface is unpaved.
APHO6	39	4A	Bldg 306	1946	IM	C	Unknown impoundments. Additional investigation recommended.
APHO7	46	4A	Bldg 1389	1946	WS, ST, OS	C	The liquid is probably surface runoff.
APHO8	52	5A	Golf Course Hole 12	1946	OS, R, EX, FA	C	Portions of this storage area has been covered by the extension of runways 34-L and 34-R.
APHO9	53	5A	Agua Chinon Wash	1946	LQ	C	The liquid could be surface runoff flowing into Agua Chinon Wash.
APHO10	79	5A	Bldg 286	1955	OS	A	The open storage area may be associated with Bldg 286.
APHO11	81	4A	Bldg 307	1955	TR, DG	C	This feature is located adjacent to the NW side of the storage yard for the trade shops and NE of Bldg. 307. Activities associated with the disturbed ground are unknown.

Table 3-1b
Aerial Photograph Features/Anomalies
MCAS El Toro BCP - March 1995

Database Tracking	SAIC Anomaly I.D. No.	BCP Parcel	Point of Reference	Year	SAIC Observations	SAIC Comments	Comments
APHO12	92	3A	DRMO Yard 2	1958	WS	C	Two areas of wet soil are identified in this anomaly. One is located near the SE corner of the DRMO storage yard #2 (SWMU 46) and the other is located SW of Bldg. 457. No analytical data has been collected for the general area SW of Bldg 457.
APHO13	102	2B	Bldg 415	1960	D	C	SWMU 125 is located on the NE side of Bldg. 415. The storage area featured in the photograph is located in an unpaved area on the NW side of the building. Also see anomalies 289 and 431
APHO14	105	2B	Horse Stables	1960	ST, WS	C	This feature is located near the horse stables. No HW-generating activities are known to have occurred at the stable area.
APHO15	113	5A	Tank Farm 3	1960	ST	C	Several stains appear at various locations adjacent to the parking apron near Tank Farm 3. It is possible that the stains could be due to runoff from the apron.
APHO16	115	1A	Tank Farm 3	1960	WS, LQ	C	The wet soil appears in a storage yard located adjacent to the SW side of Tank Farm 3. The storage yard is used to store vehicles and miscellaneous equipment.
APHO17	139	4A	Bldg 357	1964	ST	C	Currently, this area is unpaved. A hazardous materials storage locker is located approximately 20 feet north of the anomaly.
APHO18	140	4A	Bldg 324	1964	ST	C	These stains are located atop an asphalt parking area located west of Bldg 446.
APHO19	141	4A	Bldg 309	1964	ST, LQ	C	Liquid flow could be due to surface runoff.
APHO20	164	3B	DRMO Yard 3	1967	EX, LQ	C	This anomaly is located near the corner of "Z" St. and N 3rd St. in an equipment storage yard. Also see anomalies 93 and 165.
APHO21	165	3A	DRMO Yard 3	1967	OS, D	C	This anomaly is located near the corner of "Z" St. and N 3rd St. in an equipment storage yard. Also see anomalies 93 and 164.
APHO22	172	1A	Bldg 9	1967	ST, D	C	This area is currently unpaved and used as an equipment storage area.

<p align="center">Table 3-1b Aerial Photograph Features/Anomalies MCAS El Toro BCP - March 1995</p>							
Database Tracking	SAIC Anomaly I.D. No.	BCP Parcel	Point of Reference	Year	SAIC Observations	SAIC Comments	Comments
APHO23	173	5A	Bldg 14	1967	FBR, ST	C	The stains appear in the vicinity of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 7,113, 190, 227, 235, and 272.
APHO24	176	5A	Runway 34-L & 34-R	1968	EXT	C	This anomaly is located in the unpaved area between Runways 34-L and 34-R. Could be surface water runoff.
APHO25	188	2A	Agua Chinon Wash	1968	MM, R	C	This feature is SW of RI Site 3/4. The mounded material could be soil dredged from Agua Chinon Wash.
APHO26	189	2A	Crash Crew Pit #2	1968	EX, LQ	C	This feature is located SW of the Crash Crew training pits. Unknown excavation activities.
APHO27	190	1A	Tank Farm 3	1968	ST, WS	C	The stains appear in the vicinity of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 7,113, 173, 227, 235, and 272.
APHO28	199	2A	Bldg 138	1971	LQ	A	Probably surface runoff. No known washracks are in this area. An equipment storage area is located near Bldg. 138. Also see anomaly 238.
APHO29	206	1A	Bldg 10	1971	WS, LQ	A	The liquid appears to be flowing across an unpaved area near SWMU 27. A benzene plume has been identified in the groundwater in this area. Also see anomaly 482.
APHO30	208	5B	Bodiers Nursery	1971	UO	C	Unknown object is located within the boundaries of Bordiers Nursery.
APHO31	215	3B	Golf Course Hole 5	1971	DG, MMDT, UO	C	Same as anomalies 161 and 287. This area has been known to store HW generated during Desert Storm.
APHO32	227	5A	Tank Farm 3	1971	ST	C	The stains appear in the vicinity of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 7,113, 173, 190, 235, and 272.
APHO33	233	1D	Bldg 256	1973	OS	C	Mobile radar and communication equipment is commonly stored in this area. No samples have been collected from this area.
APHO34	235	1A	Tank Farm 3	1973	ST, UO, VT	C	The stains appear in the vicinity of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 7,113, 173, 190, 227, and 272.

<p align="center">Table 3-1b Aerial Photograph Features/Anomalies MCAS El Toro BCP - March 1995</p>							
Database Tracking	SAIC Anomaly I.D. No.	BCP Parcel	Point of Reference	Year	SAIC Observations	SAIC Comments	Comments
APHO35	238	2A	Bldg 137	1973	OS	C	Miscellaneous equipment is commonly stored adjacent to Buildings 137, 138, and 139. The activities that occur at these buildings is unknown. Also see anomaly 199.
APHO36	239	2A	Bldg 291	1973	WS	C	In the 1970 EPA photograph, this area appears to be unpaved. No storage activities are identified in the EPA photograph.
APHO37	241	5A	Bldg 115	1973	ST	C	SWMU 39 is located in this area. SWMU 39 was sampled and additional soil borings were recommended. Therefore, further investigation is recommended.
APHO38	252	3A	Bldg 1789	1973	EX	C	Three pits are also identified in this general area in the 1970 EPA photograph. The use of the pits is unknown.
APHO39	258	5A	Bldg 381	1973	WS, ST, HT	C	This structure appears to be Building 381, former Crash Crew Station. According to the Station Building List, Bldg 381 was demolished in 1986. Also see anomaly 449.
APHO40	271	1B	bldg 279	1974	D	C	The stain appears adjacent to Bldg. 281 (Admin./Class IV Package Store), which was demolished in 2/87. Currently, this area is an asphalt paved parking lot.
APHO41	272	1A	Bldg 287	1974	ST, WS	C	The stains appear in the vicinity of Tank Farm 3 where a former fuel bladder may have been located. Also see anomalies 7,113, 173, 190, 227, and 235.
APHO42	281	3A	Bldg 457	1974	WS	C	The 1970 EPA photographs also identified a few stains in this general area. EPA identified this area as an open storage area with drums. Currently, this area is a park. Also see anomalies 351 and 366.
APHO43	287	3B	Golf Course Hole 5	1974	EX	C	Same as anomalies 215 and 161. Unknown excavation.
APHO44	288	5C	Quarry Rd.	1974	DG, MM	C	Unknown reason for disturbed ground. No HW-generating activities are known to have occurred in this area.
APHO45	289	2B	Bldg 415	1974	WS, ST, LQ, D	C	The storage area is located in an unpaved area on the NW side of the building. Also see anomalies 102 and 431.
APHO46	416	3B	Golf Course Hole 5	1979	IM, FA, EX	C	May have been investigated as part of Site 5. Also see anomaly 452

Table 3-1b Aerial Photograph Features/Anomalies MCAS El Toro BCP - March 1995							
Database Tracking	SAIC Anomaly I.D. No.	BCP Parcel	Point of Reference	Year	SAIC Observations	SAIC Comments	Comments
APHO47	427	2B	Horse Stables	1980	OS, B, DB	C	Unknown activity. This area is located in the northern most corner of the rodeo area.
APHO48	431	2B	Bldg 415	1980	OS, D	C	Bldg 415 is a warehouse used to store miscellaneous. The HWSA associated with this activity (SWMU 125) was investigated and sampled during the RFA. NFA recommended. Also see anomalies 102 and 289.
APHO49	449	5A	Runways 34-R & 7-L	1981	WS, LQ	C	Also see anomaly 258.
APHO50	450	5A	Tank Farm 5	1981	TR	C	Unknown trench.
APHO51	452	3B	Bldg 673	1981	ST	C	Also see anomaly 416
APHO52	482	1A	Bldg 240	1984	ST	C	Stain appears to be on unpaved area near SWMU 27. SWMU 27 was sampled during the RFA and NFA recommended. Also see anomaly 206.
APHO53	502	1A	Perimeter Rd. & Magazine Rd.	1987	ST	C	

Table 3-1b
Aerial Photograph Features/Anomalies
MCAS El Toro BCP - March 1995

Database Tracking	SAIC Anomaly I.D. No.	BCP Parcel	Point of Reference	Year	SAIC Observations	SAIC Comments	Comments
Notes: SAIC Recommendation FI - Further Investigation Recommended SAIC Observations B - Building D - Drums DB - Debris DG - Disturbed ground DT - Dark-toned EX - Excavation EXT - Extraction FA - Fill area FBR - Fuel bladder revetment HT - Horizontal tank IM - Impoundment LQ - Liquid M - Material MM - Mounded material OS - Open storage R - Refuse ST - Stain TR - Trench UO - Unidentified object VT - Vertical tank WS - Wetsoil SAIC Comments (A) Verification of a feature identified in USEPA, 1991, "Site Analysis, El Toro MCAS" and occurring within the Sampling and Analysis Plan (SAP) Amendment RI/FS site boundaries. (B) Features identified in SAIC assessment that occur within the SAP Amendment IRP site boundaries. (C) Sites outside of the SAP Amendment RI/FS site boundaries Other Comments HW - Hazardous waste SWMU - Solid Waste Management Unit RFA - Resource Conservation and Recovery Act Facility Assessment							

Table 3-2 Preliminary Location Summary MCAS El Toro BCP - March 1995					
POI Number	Description	PA/SI Report Results/Findings			Final Determination
		PA	SI	Findings	
Notes: POI - point of interest PA - Preliminary Assessment SI - Site Inspection					

Various Locations of Concern (LOCs) are identified in Table 3-1a.
Additional Points of Interest (POIs) have not yet been identified for inclusion
in this BCP. Table 3-2 will be revised as POIs are identified at the Station.

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Table 3-3 Early Action Status MCAS El Toro BCP - March 1995			
IRP Site No.	Action	Purpose	Status
24	Soil gas survey	Identify potential shallow surface sources of VOC groundwater contamination.	Fieldwork completed in June 1994. Final technical memorandum submitted on 31 October 1994.
25	Soil gas survey	Further evaluate site for possible expedition of remediation.	Fieldwork completed in June 1994. Final technical memorandum submitted on 31 October 1994.

**Table 3-3 will be updated as additional early actions
at IRP sites are implemented and completed.**

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Table 3-4 Mission/Operational-Related Compliance Projects MCAS El Toro BCP - March 1995		
Project	Status	Regulatory Program
USTs	<p>A Draft UST Monitoring Plan was prepared for the Station and submitted in February 1993.</p> <p>The Station is currently working with the OCHCA to bring the Station's USTs into compliance to obtain permits.</p> <p>Installed vadose zone monitoring system at 12 USTs, tank level monitors in 27 USTs, liquid probes in 3 USTs, and in-situ leak detection monitoring at 11 USTs.</p>	California UST Regulations
Asbestos and Lead-Based Paint Inspections	The Navy Public Works Center in currently performing an asbestos investigation at the Station Family Housing and other related units.	TSCA
Repair/modification of various OWS units	<p>Repair/modification activities are currently in progress.</p> <p>Repairs/modifications are expected to be completed in 1995.</p>	NPDES

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Table 3-5
Closure-Related Compliance Projects
MCAS El Toro BCP - March 1995

Project	Status	Regulatory Program
Removal of 70 inactive USTs	Removal of these USTs will begin in mid-1995.	California UST Regulations Orange County Health Care Agency (OCHCA).
Inspection of 43 former UST locations	Draft Work Plan is currently being reviewed by SWDIV. Implementation of the Work Plan is expected to begin in mid-1995.	California UST Regulations OCHCA and RWQCB
Free product removal at Tank 398	The work plan is currently being reviewed by the local regulatory agencies. Construction of the free product removal system will be scheduled to begin in mid-1995.	California UST Regulations OCHCA and RWQCB
Closure of RCRA storage facility (Bldg. 673-T3)	MCAS El Toro has been issued an extension for closure of this facility by DTSC. Under this extension, the facility must be closed by 14 September 1995.	RCRA
Follow-up sampling at RFA SWMUs/AOCs recommended for further action	The work plan is currently being prepared by the CLEAN II contractor.	RCRA
Evaluation of the less than 90-day accumulation areas (accumulation areas)	Waste accumulation areas on-Station are currently being evaluated for removal and/or decontamination strategies. The evaluation is expected to be completed by late-1995.	RCRA
Repair/modification of various OWS units on-Station	Repair/modification activities are currently in progress. Repairs/modifications are expected to be completed in 1995.	NPDES

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Site Number	UST Number	Action	Purpose	Status
Various (1)		Evaluation of less than 90-day accumulation areas	Evaluate accumulation areas for removal and/or decontamination strategies	In progress

Notes:

(1) Refer to Table 3-9 for a list if accumulation areas being evaluated.

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Table 3-7
Underground Storage Tank Inventory
MCAS El Toro BCP Report - March 1995

LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 1A	1A	1	1943	500 Steel	Diesel	Removed (3)	From JTL report: The area was isolated, covered with visqueen liner and backfilled with clean sand and its native soil. Closure report indicates tank was full of fuel oil.	The JTL tank closure report recommended investigating the extent of vertical and lateral contamination around fill pipe (95' south of the tank) at a later date. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Sand	X	Contaminated soil found in area of the fill pipe only. TPH levels at this area were 6900 ppm and 41 ppb. Highest BTEX levels: B = 3 ppb, T = 5 ppb.	A,B,D	6
UST 1B	1B	1	1943	500 Steel	Diesel	Removed (3)	From JTL report: The excavation was backfilled with the contaminated soil, lined with the LDPE lining, and covered with washed concrete sand.	Further investigation of the vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Sand	X	Soil contamination found in area of the tank. Highest levels of TPH were 10,730 ppm and 10,460 ppm (east side of tank). Highest BTEX levels: B = 33 ppb, T = 168 ppb, X = 949 ppb, E = 1,062 ppb.	A,B,D	6
UST 6A	6A	6	1943	1,000 Steel	Fuel oil	Inactive	From 1993 Station UST Inventory: Deactivated on 1/1/81.	Tank scheduled for removal in 1996 per UST Tiger Team	SB	1981	Sand			A,B	7
UST 6B	6B	6	1943	500 Steel	Fuel oil	Inactive	From 1993 Station UST Inventory: Deactivated on 1/1/81.	Tank scheduled for removal in 1996 per UST Tiger Team	S	1981	Sand			A,B	7
UST 11	11	11	1943	500 Steel	Diesel	Removed (3)	From JTL report: Contaminated soil was left in-place, hole was backfilled.	Further investigation of vertical and lateral extent of contamination recommended per 1993 Station UST Inventory. Sample results are being evaluated by CLEAN II contractor for potential further action.	S	1991	Sand	X	5 soil samples collected: TPH (Diesel)=1,300 ppm, T=6 ppb, X=6 ppb.	A,B,D	6
UST 12	12	12	1943	500 Steel	Diesel	Removed (3)	From JTL report: Excavation lined with LDPE liner and backfilled with clean sand and native soil.	Further investigation of the vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Sand	X	Highest TPH levels in soil taken from tank excavation were 240 ppm and 34 ppm around fill pipe opening. Highest BTEX levels under tank: T = 11 ppb, X = 46 ppb, E = 6 ppb.	A,B,D	3*
UST 13	13	13	1943	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed on 12/13/91. Excavation backfilled using clean sand and native soil from hole.	Soil results indicate no soil contamination (31 ppm TPH found) according to the JTL tank closure report. JTL report recommends closure to be considered final.	LC	1991	Sand	X	The soil sample taken 2 ft under tank contained 31 ppm of TPH. All other samples were non-detects. BTEX not detected in samples.	A,B,D	3*
UST 14	14	14	1943	500 Steel	Diesel	Removed (3)	From 1993 Station UST Inventory: A confirmed release was reported on 12/31/91 when tank and piping were removed. From JTL report: The excavation was backfilled with clean sand and native soil from excavation.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Sand	X	Sample results for 2 ft under tank: TPH = 2500 ppm, T = 9 ppb, and X = 8 ppb. All other samples were non-detect for TPH and BTEX.	A,B,D	6
UST 24	24	24	1943	500 Steel	Diesel	Removed			SB	1976	None			A,B	7

Table 3-7
Underground Storage Tank Inventory
MCAS El Toro BCP Report - March 1995

LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 32	32	32	1943	500 Steel	Diesel	Removed (3)	From JTL report: UST not found in a 20'x20'x12' area & thought to have been removed at an earlier date. Associated piping was removed on 12/19/91. 4 cubic yards of contaminated soil sent to landfill. Excavation lined with LDPE & backfilled with sand.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Sand	X	TPH levels in soils around tank were: 12,000 ppm (spoil pile), 720 & 180 ppm (west & east side of excavation, respectively), 132 ppm 2' under tank, & 110 ppm 20' west of tank under fill pipe, other samples=ND. Highest BTEX levels in spoil: X=2900 ppb, E=850 ppb.	A,B,D	6
UST 33	33	33	1943	500 Steel	Diesel	Removed (3)	From JTL report: UST removed on 12/23/91. Excavation lined with LDPE liner and backfilled with washed concrete sand.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Sand	X	TPH levels in soils around the tank: 15,000 ppm (2' under tank), 910 & 560 ppm (west & east side of excavation), & 4,200 ppm at fill opening, other samples=ND. Highest BTEX levels under tank: B= 47 ppb, T= 190 ppb, X= 1900 ppb, E = 480 ppb.	A,B,D	6
UST 34	34	34	1943	500 Steel	Fuel oil	Removed (3)	From JTL: UST not found in a 20'x20'x12' area & thought to have been removed at an earlier date. Associated piping removed on 12/19/91. Contaminated areas isolated, backfilled with spoil, lined with LDPE liner, & backfilled with clean fill, sand and soil.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Sand	X	TPH levels in soils around the tank were : 1,000 & 500 ppm (south & north side of tank excavation), 1,500 ppm (spoil sample), 770 ppm (2' under tank) & 220 ppm at fill opening, other samples=ND. Highest BTEX level: T=16 ppb, X=44 ppb, E=7 ppb.	A,B,D	6
UST 35	35	35	1943	500 Steel	Fuel oil	Removed (3)	From JTL report: UST removed on 12/23/91. Excavation lined with LDPE liner and backfilled with clean fill.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Sand	X	TPH levels in soils around the tank were : 11,000 ppm (2' under tank), 9,200 & 41 ppm (west and east side of excavation), and 4,600 ppm at fill opening, other samples=ND. Highest BTEX level in west side excavation sample: X=150 ppb, E=41 ppb.	A,B,D	6
UST 37	37	37	1943	500 Steel	Diesel	Removed (3)	From JTL report: At removal, tank was full of fuel oil according to closure report. Excavation backfilled with gravel to four feet from the top of excavation. Remainder of excavation backfilled with native soil.	Soil results indicate no soil contamination (TPH/BTEX was found) according to the JTL tank closure report. JTL report recommends closure to be considered final.	LC	1991	Fuel Oil	X	TPH levels in soils around the tank were : 66 ppm (2' under tank), 25 ppm (south side of excavation), and 17 ppm for the spoil pile. Other samples=ND. Highest BTEX levels under tank: T=7 ppb, X=77 ppb, E=8 ppb.	A,B,D	3*
UST 38	38	38	1943	1,500 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team	S		Sand			A,B	7
UST 40	40	40	1943	500 Steel	Diesel	Removed (3)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 12/19/91. Excavation backfilled with original native soil.	Soil results indicate no soil contamination according to the JTL tank closure report. JTL report recommends closure to be considered final.	LC	1991	Unknown	X	TPH levels in soils around the tank were : 29 ppm (west side of excavation), and 19 ppm around fill pipe opening. Other samples=ND. Highest BTEX levels: X=43 ppb, E=6 ppb.	A,B,D	3*

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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 41	41	41	1943	500 Steel	Diesel	Removed (3)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 12/19/91. Excavation backfilled with washed concrete sand and native soil.	Soil results indicate no soil contamination according to the JTL tank closure report. JTL report recommends closure to be considered final.	LC	1991	None	X	TPH levels in soils around the tank were : 16 ppm around fill pipe opening, other samples=ND. Highest BTEX level around fill pipe opening: X=35 ppb.	A,B,D	3*
UST 42	42	42	1943	500 Steel	Fuel oil	Removed (1, 3)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 12/19/91. Excavation backfilled with washed concrete sand and native soil.	JTL report recommends closure to be considered final.	LC	1991	None	X	TPH and BTEX not detected in samples.	A,B,D	2*
UST 43	43	43	1943	500 Steel	Fuel oil	Removed (3)	From JTL report: Piping associated with the UST removed on 12/19/91. Contaminated areas isolated, and excavation was lined with LDPE liner and backfilled with clean fill.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	None	X	TPH levels in soils around the tank were : 230 & 74 ppm (east & west side of tank excavation), 510 ppm (spoil sample), & 350 ppm at fill opening. Other samples=ND. Highest BTEX level around fill pipe opening: X=23 ppb.	A,B,D	3*
UST 44	44	44	1943	500 Steel	Diesel	Removed (3)	From 1993 Station UST Inventory: Demolished facility and removed tank in 1960.		S	1960	None	Unknown		A,B	7
UST 45	45	45	1943	500 Steel	Fuel oil	Removed (3)	From 1993 Station UST Inventory: Demolished facility and removed tank in 1960.		S	1960	None	Unknown		A,B	7
UST 46	46	46	1943	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed on 11/27/91. Excavation was backfilled with washed concrete sand and its original native soil.	Soil results indicate no soil contamination according to the JTL tank closure report. JTL report recommends closure to be considered final.	LC	1991	Sand	X	TPH levels in soils around the tank were : 38 ppm (north side of tank excavation), other samples=ND. BTEX detected in sample taken from west side of excavation with B=26 ppb. Other samples=ND.	A,B,D	3*
UST 53	53	53	1943	500 Steel	Diesel	Removed (3)	From 1993 Station UST Inventory: UST removed on 12/13/91. Contaminated soil left in-place, hole was backfilled.	Contaminated soil discovered while removing tank per 1993 Station UST Inventory. Further investigation required.	S	1991	Unknown	Unknown	TPH (Diesel)=3,400 ppm, BTEX=ND.	A,B,D	6
UST 57	57	57	1943	15,000 Concrete	Fuel oil	Removed (4)	UST 57 listed as a 5,000 gal steel UST in 1993 Station UST Inventory. AP removed a 15,000 gal concrete tank.		LC	1993	Unknown	X	3 soil samples collected: TPH (Fuel Oil)=350 ppm, BTEX=ND.	A,B,E	3*
UST 58	58	58	1943	5,300 Concrete	Diesel	Removed (4)	UST 58 listed as a 2,600 gal steel UST in 1993 Station UST Inventory. AP removed a 5,300 gal concrete tank.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	3 soil samples collected: TPH (Fuel Oil)=6,200-20,000 ppm, BTEX=ND.	A,B,E	6
UST 59	59	59	1943	5,300 Concrete	Diesel	Removed (4)	UST 59 listed as a 2,600 gal steel UST in 1993 Station UST Inventory. AP removed a 5,300 gal concrete tank.		LC	1993	Unknown	X	4 soil samples collected: TPH(Diesel)=87-1,900 ppm, T=140 ppb, E=40-1,400 ppb, X=200-6,000 ppb.	A,B,E	6
UST 60	60	60	1943	2,000 Steel	Diesel	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	S		Sand			A,B	7
UST 62	62	62	1943	500 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	SB	1962	Sand			A,B	7

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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 63A	63A	63	1943	500 Steel	Diesel	Removed (4)	From 1993 Station UST Inventory: Two tanks connected by a manifold found and removed on 11/1/91. From JEG report: ~850 gal of suspected product released into excavation when manifold between 63A and B was broken.	Further investigation of vertical and lateral extent of contamination recommended in JEG tank closure report.	LC	1991	Sand	X	TPH concentration for soil below tank was 24,000 ppm and for the soil stockpile was 33,000 ppm. BTEX levels were just above the detection limit.	A,B,F	6
UST 63B	63B	63	1943	500 Steel	Diesel	Removed	From 1993 Station UST Inventory: Two tanks connected by a manifold found and removed on 11/1/91. From JEG report: ~850 gal of suspected product released into excavation when manifold was broken. Excavation lined with plastic sheeting and backfilled.	Further investigation of vertical and lateral extent of contamination recommended in JEG tank closure report.	LC	1991	Sand	X	TPH concentrations for soil below tank was 18,000 ppm and for the soil stockpile was 33,000 ppm. BTEX levels were just above the detection limit.	A,B,F	6
UST 68	68	68	1943	500 Steel	Diesel	Removed (3)	From JTL report: Excavation was lined with LDPE liner and then backfilled with washed concrete sand.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1992	Sand	X	TPH levels in soils around the tank were : 5,100 ppm (2' under tank). Other samples were non-detect. BTEX detected in sample taken from under tank only. B=109 ppb, T=104 ppb, X=114 ppb, E=9 ppb.	A,B,D	6
UST 69	69	69	1943	500 Steel	Fuel oil	Removed (1, 3)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 1/30/92. Excavation was backfilled with washed concrete sand and original soil.	JTL report recommends closure to be considered final.	LC	1960	Sand	X	TPH and BTEX not detected in all samples.	A,B,D	2*
UST 71	71	71	1943	500 Steel	Fuel oil	Removed (3)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 2/6/92. Excavation was backfilled with its original soil.	Soil results indicate no soil contamination according to the JTL tank closure report. JTL report recommends closure to be considered final.	LC	1991	Sand	X	TPH not detected in soil samples. BTEX detected in sample taken from fill pipe area; X=34 ppb.	A,B,D	3*
UST 73	73	73	1943	500 Steel	Diesel	Removed (5)	From 1993 Station UST Inventory: UST not found. Removed piping on 2/6/92.	No further investigation recommended in the 1993 Station UST Inventory.	S	1960	Sand	Unknown		A,B	7
UST 74	74	74	1943	500 Steel	Diesel	Removed (1)	UST not found in an excavated area 20'x20'x12'. Piping associated with the UST From JTL report: was removed on 2/6/92. Excavation was backfilled with its original soil.	JTL report recommends closure to be considered final.	LC	1960	Sand	X	TPH and BTEX not detected in all samples.	A,B,D	2*
UST 77	77	77	1943	500 Steel	Diesel	Removed (1, 3)	From JTL report: UST removed on 2/14/91. Excavation backfilled with clean sand and original soil.	JTL report recommends closure to be considered final.	LC	1992	Unknown	X	TPH & BTEX not detected in all samples.	A,B,D	2*

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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 78	78	78	1943	500 Steel	Diesel	Removed	From JTL report: Tank removed 12/4/91 and was found full of fuel oil. Excavation was backfilled with contaminated soil, lined with LDPE liner, and backfilled with clean sand.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Sand	X	TPH levels in soils around tank were : 25,000 ppm (2' under tank), 48,000 & 6,800 ppm (north & south side of excavation), 48,000 ppm (spoil), other samples=ND. Highest BTEX level detected in spoil sample: B=120 ppb, T=1200 ppb, X=6100 ppb, E=1200 ppb.	A,B,D	6
UST 79	79	79	1943	500 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	S	1960	Sand			A,B	7
UST 80	80	80	1943	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed 12/4/91 and was found full of fuel oil. Excavation was backfilled with contaminated soil, lined with LDPE liner, and backfilled with clean sand.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Sand	X	TPH levels in soils around tank were : 32,000 ppm (2' under tank) and 2,500 ppm (northeast side of excavation), other samples non-detect. Highest BTEX level detected in sample taken from under tank: B=220 ppb, T=240 ppb, X=9400 ppb, E=2100 ppb.	A,B,D	6
UST 81	81	81	1943	500 Steel	Diesel	Removed (1)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 1/30/92. Excavation backfilled with its original soil.	JTL report recommends closure to be considered final.	LC	1960	Sand	X	TPH & BTEX not detected in all samples.	A,B,D	2*
UST 82	82	82	1943	500 Steel	Diesel	Removed (1)	From JTL report: UST not found in an excavated area 20'x20'x12'. Piping associated with the UST was removed on 11/26/92. Excavation backfilled with its original soil.	JTL report recommends closure to be considered final.	LC	1960	Sand	X	TPH & BTEX not detected in all samples.	A,B,D	2*
UST 94	94	94	1943	1,500 Steel	Fuel oil	Removed (4)	From 1993 Station UST Inventory: UST removed 5/13/93. AP removed a 1,500 gal steel tank.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	3 soil samples collected: TPH (Diesel)=62-300 ppm, TPH (Fuel Oil)=330 ppm, E=9 ppb, X=30 ppb.	A,B,E	3*
UST 114A	114A	114	1966	1,500 Steel	Fuel oil	Removed	Tank removed 10/11/91. Excavation was backfilled and resurfaced with asphalt.	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final.	LC		Unknown	X	TPH concentrations of 220 and 550 ppm detected in samples taken from the NW corner of the excavation and spoil pile, respectively. E= 8 ppb in spoil pile sample. BTEX not detected in other sample.	B	3*
UST 114B	114B	114	1966	560 Steel	Diesel	Removed (5)	Per OCHCA: records do not indicate removal. From 1993 Station database: UST removed 10/11/91. No mention of contaminated soil.		S	1991	Sand	Unknown		A,B	7
UST 115A	115A	115	1943	650 Steel	Fuel oil	Removed (4)	AP removed a 650 gal steel tank	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	4 soil samples collected: TPH (Fuel Oil)=68-7,900 ppm, T=10-360 ppb, E=70-340 ppb, X=450-2,700 ppb	B,E	6
UST 115B	115B	115	1966	560 Steel	Fuel oil	Inactive per OCHCA	From 1993 Station UST report: 560 gal UST removed 6/17/93.		S	1993	Sand	Unknown		A,B	7

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UST 116	116	116	1943	500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: Deactivated and filled with sand in 1964.	Tank scheduled for removal in 1996 per UST Tiger Team.	S	1964	Sand			A,B	7
UST 117	117	117	1943	500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: Deactivated and filled with sand in 1964.	Tank scheduled for removal in 1996 per UST Tiger Team.	S	1964	Sand			A,B	7
UST 126	126	126	1943	500 Steel	Diesel	Removed (3)	From 1993 Station UST Inventory: UST removed on 12/4/91. Contaminated soil left in-place, hole was back-filled.	Contaminated soil discovered while removing tank according to the 1993 Station UST Inventory. Sample results are being evaluated by CLEAN II contractor for potential further action.	S	1991	Sand	X	Unknown number of soil samples collected: TPH(Diesel)=990-32,000 ppm, B=140 ppb, T=2,100 ppb, X=8-8,300 ppb, E=44-1,600 ppb.	A,B,D	6
UST 133	133	133	1943	500 Steel	Diesel	Removed (1)	From JTL report: UST removed on 12/13/91. Excavation backfilled with washed concrete sand and original soil.	JTL report recommends closure to be considered final.	LC	1991	Sand	X	TPH & BTEX not detected in all samples.	A,B	2*
UST 138	138	138	1943	1,000 Steel	Diesel	Inactive	From 1993 Station UST Inventory: Deactivated and filled with sand in 1974.	Tank scheduled for removal in 1996 per UST Tiger Team.	SB	1974	Sand			A,B	7
UST 159	159	159	1943	200 Steel	Fuel oil	Inactive	From 1993 Station UST Inventory: Tank filled with sand on an unknown date.	Tank scheduled for removal in 1996 per UST Tiger Team.	SB		Sand			A,B	7
UST 224	224	224	1943	500 Steel	Fuel Oil	Inactive	From 1993 Station UST Inventory: Facility demolished and tank filled with sand in 1959.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1959	Sand			A,B	7
UST 241	241	241	1945	850 Steel	Diesel	Removed (4)	From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 850 gal steel tank in 1993.		LC	1993	Sand	X	2 soil samples collected: TPH (Fuel Oil)=25,000 ppm, E=1,400 ppb, X=9,100 ppb	A,B,E	6
UST 243	243	243	1944	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500 gal concrete tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Sand	X	3 soil samples collected: TPH (Fuel Oil)=290-11,000 ppm, BTEX=ND.	A,B,E	6
UST 247	247	247	1945	1,500 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Facility demolished and tank filled with sand in 1977.	Tank scheduled for removal in 1996 per UST Tiger Team.	SB	1977	Sand			A,B	7
UST 248	248	248	1945	1,500 Concrete	Fuel oil	Removed (4)	From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 1,500 gal concrete tank in 1993.		LC	1993	Sand	X	1 soil sample collected: TPH (Fuel Oil)=79 ppm, BTEX=ND.	A,B,E	3*
UST 249	249	249	1945	1,500 Concrete	Fuel oil	Removed (4)	From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 1,500 gal concrete tank in 1993.		LC	1993	Sand	X	2 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND.	A,B,E	2*
UST 250	250	250	1945	1,500 Concrete	Fuel oil	Removed (4)	From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 1,500 gal concrete tank in 1993.		LC	1993	Sand	X	2 soil samples collected: TPH (Fuel Oil)=77 ppm, BTEX=ND.	A,B,E	3*
UST 251	251	251	1944	2,000 Concrete	Fuel oil	Removed	From 1993 Station UST Inventory: 1987 Survey - Tank listed as removed.		S	1987	None	Unknown		A,B	7
UST 252	252	252	Unknown	1,400 Steel	Diesel	Inactive	From RFA: SWMU 281-not sampled; UST not located.	Tank scheduled for removal in 1996 per UST Tiger Team.	NL		Unknown			A,B,C	7

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UST 253	253	253	1945	1,500 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Deactivated in 1948. Tank filled with sand in 1961.	Tank scheduled for removal in 1996 per UST Tiger Team.	SB	1948	Sand			A,B	7
UST 254	254	254	1958	1,500 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Tank deactivated in 1961 and filled with sand in 1977.	Tank scheduled for removal in 1996 per UST Tiger Team.	SB	1961	Sand			A,B	7
UST 255	255	255	1945	1,500 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Tank deactivated and filled with sand in 1961.	Tank scheduled for removal in 1996 per UST Tiger Team.	SB	1961	Sand			A,B	7
UST 256	256	256	1945	2,000 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	S		Sand			A,B	7
UST 257	257	257	1944	2,000 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	S		Sand			A,B	7
UST 258	258	258	1944	2,000 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Facility demolished in 1987; 1987 Survey lists tank as being filled with sand.	Tank scheduled for removal in 1996 per UST Tiger Team.	S	1987	Sand			A,B	7
UST 259	259	259	1945	2,600 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Facility demolished and tank filled with sand in 1982.		S	1962	Sand			A,B	7
UST 260	260	260	1945	2,600 Concrete	Fuel oil	Removed (5)	From 1993 Station UST Inventory: Facility demolished and tank filled with sand in 1979. Tank is identified as being removed in a memorandum dated 19 October 1994 from D. Detmers.		S	1979	Sand			A,B	7
UST 263	263	263	1945	3,400 Concrete	Diesel	Removed (4)	From 1993 Station UST Inventory: UST removed 5/11/93. AP removed a 3,400 gal concrete tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	5 soil samples collected: TPH (Diesel)=3,100-5,900 ppm, T=80 ppb, E=360 ppb, X=1,000 ppb.	A,B,E	6
UST 264	264	264	1945	3,400 Concrete	Diesel	Removed	From the 1993 Station UST Inventory: UST removed 5/10/93. AP removed a 3,400 gal concrete tank in 1993.		LC	1993	Unknown	X	3 soil samples collected: TPH (Diesel)=650-7,200 ppm, E=10-50 ppb, X=330-640 ppb.	A,B,E	6
UST 265	265	265	Unknown	1,400 Steel	Diesel	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Unknown			A,B	7
UST 266	266	266	1945	1,500 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Facility demolished and tank filled with sand in 1974.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1974	Sand			A,B	7
UST 267	267	267	1945	2,000 Steel		Inactive	From 1993 Station UST Inventory: Tank filled with sand in 1982.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1982	Sand			A,B	7
UST 268	268	268	1945	1,500 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Tank filled with sand in 1982.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1982	Sand			A,B	7
UST 269	269	269	1945	1,500 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Tank filled with sand in 1974.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1974	Sand			A,B	7
UST 270	270	270	1945	1,500 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Tank filled with sand in 1974.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1974	Sand			A,B	7

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UST 272	272	272	1944	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500 gal concrete tank.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Sand	X	3 soil samples collected: TPH (Fuel Oil)=67-14,200 ppm, BTEX=ND.	A,B,E	6
UST T-4	T-4	272	1988	2,000 Fiberglass Coated Steel	Waste Oil	Active	From RFA: SWMU 58-not sampled; tank normally empty because its used for spill containment, no evidence of release; NFA recommended. Instituted leak detection monitoring in-place. From EG&G report: Tank stores spilled fuel from Tanks 189 & 191.		LC		Waste Oil			A,B,C	7
UST 273	273	273	1944	300 Steel	Fuel oil	Removed (4)	AP removed a 300 gal steel tank; tank was located under a concrete slab/encasement.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Sand	X	3 soil samples collected: TPH (Diesel)=140-720 ppm, TPH (Fuel Oil)=41-150 ppm, T=400 ppb, X=420 ppb.	A,B,E	6
UST 274	274	274	1945	1,500 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1980	Sand			A,B	7
UST 275	275	275	1944	1,500 Concrete	Fuel oil	Removed (5)	This tank is identified as being removed in a memorandum dated 19 October 1994 from D. Delmers.	Electromagnetic and potholing surveys were conducted, however the tank could not be located.	S	Unknown	Sand			A,B	7
UST 276	276	276	1945	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500 gal concrete tank.		LC	Unknown	Sand	X	4 soil samples collected: TPH (Fuel Oil)=1,900-17,000 ppm, E=460 ppb, X=2,800 ppb.	A,B,E	6
UST 277	277	277	1945	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500 gal concrete tank.		LC	1993	Sand	X	1 soil sample collected: TPH (Fuel Oil)=34 ppm, BTEX=ND.	A,B,E	3*
UST 279	279	279	1945	1,500 Concrete	Fuel oil	Inactive			S		Sand			A,B	7
UST 280	280	280	1945	2,000 Concrete	Diesel	Removed	From JEG report: UST removed 10/5/91; Excavation was lined with plastic sheeting, backfilled, and resurfaced. Stockpiled soil removed for disposal on 11/1/91.	Further investigation of vertical and lateral extent of contamination recommended in JEG tank closure report.	LC	1991	Unknown	X	Sample results for northern edge of excavation: TPH sample diluted & concentration was 1,600 ppm; BTEX concentrations were: T=1,100 ppb, E=6,500 ppb, and X=5,300 ppb. Sample under tank contained 900 ppm TPH; BTEX levels slightly above detection limit.	A,B,F	6
UST 281	281	281	1944	2,000 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1987	Sand			A,B	7
UST 282	282	282	1945	1,500 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1980	Sand			A,B	7
UST 283	283	283	1945	1,500 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1980	Sand			A,B	7
UST 284	284	284	1945	2,000 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1974	Sand			A,B	7
UST 285	285	285	1944	2,000 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1979	Sand			A,B	7
UST 288	288	288	1944	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500 gal concrete tank.		LC	1993	Unknown	X	3 soil samples collected: TPH (Fuel Oil)=12-56 ppm, BTEX=ND.	A,B,E	3*
UST 292	292	292	1944	1,500 Concrete	Diesel	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Sand			A,B	7
UST 294	294	294	1944	1,500 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1960	Sand			A,B	7

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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 295	295	295	1984	1,000 Fiberglass	Diesel	Removed (1)	From JEG report: UST removed on 10/15/91; Excavation backfilled and resurfaced with concrete.	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final.	LC	1991	Sand	X	TPH and BTEX were non-detect in samples.	A,B	2*
UST 296	296	296	1984	6,000 Fiberglass	Diesel	Removed (1)	From JEG report: UST removed on 10/15/91; Excavation was backfilled.	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final.	LC	1991	Sand	X	TPH and BTEX were non-detect in samples.	A,B	2*
UST T-11	T-11	297	1988	1,000 Fiberglass Coated Steel	JP-5	Active	From RFA: SWMU 75-not sampled; NFA recommended based on recent installation date. Instititue leak detection monitoring in-place. From EG&G report: Tank is slop fuel tank between Bldg 297 & 388.		LC		Waste Fuel			A,B,C	7
UST 304A	304A	304	1944	1,500 Concrete	Fuel oil	Removed (4)	From EG&G report: UST 304A listed as a 500 gal steel No 2 fuel oil tank. AP removed a 1,500 gal concrete fuel oil tank.		S	1993	Sand	X	4 soil samples collected: TPH (Diesel)=10-3,200 ppm, E=290 ppb, X=1,600 ppb.	B,E	6
UST 304B	304B	304	1944	1,400 Concrete	Fuel oil	Removed (5)			SB	1993	Sand			A,B	7
UST 306	306	306	1944	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed on 12/13/91. Excavation was backfilled with contaminated soil, lined with LDPE liner and then backfilled with washed concrete sand.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Unknown	X	TPH levels in soils around the tank were : 130 ppm (2' under tank) and 680 ppm (2' under pipe). TPH level in spoil sample was non-detect. BTEX not detected in all samples.	A,B,D	3*
UST 317	317	317	1945	275 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Unknown			B	7
UST 318	318	318	1945	275 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Unknown			B	7
UST 319	319	319	1945	275 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Unknown			B	7
UST 321	321	321	1984	1,000 Fiberglass	Diesel	Removed (4)	From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 1,000 gal fiberglass tank in 1993.		LC	1993	Unknown	X	4 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND.	A,B,E	2*
UST 327	327	327	1945	2,600 Concrete	Diesel	Removed	From JEG report: UST removed 10/1/91; soil visibly stained and odorous, tank was eroded and crumbling; Excavation was lined with plastic sheeting and backfilled.	Further investigation of vertical and lateral extent of contamination recommended in JEG tank closure report.	LC	1991	Unknown	X	Sample concentrations from: Under tank TPH=2,000 ppm, E & X=23 ppb; SW part of excavation TPH=8,900 ppm, E=5,600 ppb, X= 5,100 ppb; Under fill lines TPH=12,000 ppm, E=3,200 ppb, X=7,500 ppb; Spoil sample TPH=9,500 ppm, T=590 ppb, E=1,100 ppb, X=4,800 ppb.	A,B,F	6

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UST 328	328	328	1945	2,600 Concrete	Diesel	Removed	From JEG report: UST removed 10/2/91; soil staining noticed throughout excavation; excavation lined with plastic sheeting and backfilled. Clean soil used to bring to grade, and grass seed was planted.	Further investigation of vertical and lateral extent of contamination recommended in JEG tank closure report.	LC	1991	Unknown	X	Sample concentrations from: Under tank TPH=16,000 ppm, E=4,800 ppb, X=12,000 ppb; SW part of excavation near fill line TPH=66,000 ppm, T=2,300 ppb, E=2,500 ppb, X= 10,000 ppb; Spoil sample TPH=13,000 ppm, E=1,100 ppb, X=1,500 ppb.	A,B,F	6
UST 329	329	329	1945	3,100 Concrete	Diesel	Removed (4)	From 1993 Station UST Inventory: UST removed 5/11/93. AP removed a 3,100 gal concrete tank in 1993.		LC	1993	Sand	X	2 soil samples collected: TPH (Diesel)=4,200 ppm, BTEX=ND.	A,B,E	6
UST 335	335	335	1945	4,000 Steel	Fuel oil	Removed (5)			SB		Sand			A,B	7
UST 351	351	351	1944	500 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1960	Sand			A,B	7
UST 365	365	365	1954	2,500 Steel	Diesel	Removed	This tank was removed on 7/10/87 according to James Hendron/OCHCA. OCHCA Plan Check #87-306, LUST #87-159.		S	1988	Unknown	Unknown		A,B	7
UST 366	366	366	1954	2,500 Steel	Diesel	Abandoned In-Place	AP abandoned UST 366 in place. Tank was filled with a sand cement slurry & backfilled with uncontaminated soil. A soil sample was taken (maximum depth of typical soil sample was 3' below tank). Soil boring filled with cement.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Cement	X	2 soil samples collected: TPH (Fuel Oil)=2,400 ppm, E=330-450 ppb, X=1,800-2,300 ppb.	A,B,E	6
UST 367	367	367	1954	2,500 Steel	Diesel	Abandoned In-Place	AP abandoned UST 367 in place. Tank was filled with a sand cement slurry & backfilled with uncontaminated soil. A soil sample was taken (maximum depth of typical soil sample was 3' below tank). Soil boring filled with cement.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Cement	X	3 soil samples collected: TPH (Fuel Oil)=2,500-5,700 ppm, TRPH=2,500-40,000, BTEX=ND.	A,B,E	6
UST 368	368	368	1984	2,000 Fiberglass	Diesel	Removed	From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 2,000 gal fiberglass tank in 1993.		LC	1993	Unknown	X	2 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND.	A,B,E	2*
UST 369	369	369	1984	4,000 Fiberglass	Diesel	Removed (4)	From 1993 Station UST Inventory: UST removed 5/19/93. AP removed a 4,000 gal fiberglass tank in 1993.		LC	1993	Unknown	X	2 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND.	A,B,E	2*
UST 375	375	375	1954	10,000 Steel	Fuel oil	Removed (4)	From 1993 Station UST Inventory: Supply and return lines have been disconnected in the boiler room. From AP As-Built: This tank removed from the AP tank removal contract; tank noted as removed at an unknown date on drawings.		LC	Unknown	Unknown	X	No contamination detected per OCHCA letter dated 23 May 1994. OCHCA plan check #89PC266.	A,B,E	2*

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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 762B	762B	390	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 209-comb w/SWMU 208-NFA; receives waste oil from 762A.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = ND VOCs < CRDL	A,B,C	7
UST 398	398	397	1956	108,000 Steel	JP-5	Removed	UST 398 replaced by USTs 902A, B, & C which were installed in 1993 according to El Toro staff.	Pump and treat along with soil venting have been identified as a clean-up option in the 1993 Station UST inventory.	LC		JP-5			A,B,H	6
UST 399	399	399	1955	500 Steel	Diesel	Inactive	From RFA: SWMU 285-not sampled; currently filled with sand.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Sand			A,B,C	7
UST 405	405	405	1956	1,200 Steel	Diesel	Removed (4)	AP removed a 1,200 gal steel tank in 1993.		LC	1993		X	4 soil samples collected: TPH (Fuel Oil)=23-6,600 ppm, E=2,200 ppb, X=6,900 ppb.	A,B,E	6
UST 406	406	406	1956	1,200 Steel	Diesel	Removed (4)	AP removed a 1,200 gal steel tank in 1993.		LC	1993	Sand	X	4 soil samples collected: TPH (Fuel Oil)=74-5,400 ppm, E=320 ppb, X=1,600 ppb.	A,B,E	6
UST 404	404	414	1957	500 Steel	Diesel	Active	Located in a restricted area.	An automatic tank monitoring level system and spill containment were installed.	S		Unknown			A,B,I	7
UST 414A	414A	414	1990	30,000 Fiberglass Coated Steel	JP-5	Active	UST 414A monitored by a system similar to "Tank Watch" monitoring system used at USTs 902A,B,&C. UST T-A is a duplicate of UST 414A.		SB		JP-5			A,B,G	7
UST 414B	414B	414	1990	30,000 Fiberglass Coated Steel	JP-5	Active	UST 414B monitored by a system similar to "Tank Watch" monitoring system used at USTs 902A,B,&C. UST T-B is a duplicate of UST 414B.		SB		JP-5			A,B,G	7
UST 414C	414C	414	1990	2,500 Fiberglass Coated Steel	JP-5	Active	According to El Toro staff, UST is a fuel separator used to remove sediment and water from fuel prior to distribution;monitored by a system similar to the "Tank Watch" monitoring system at USTs 902A,B,&C. UST T-C (SWMU 20) is a duplicate of UST 414C.		SB		JP-5			G,H	7
UST 435	435	435	1959	1,000 Steel	Diesel	Removed	From JEG report: UST removed 10/11/91; residual product removed from tank and tank cleaned; excavation backfilled and seeded with grass.	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final.	LC	1991	Unknown	X	Sample concentrations: Under tank TPH=320 ppm, BTEX=ND; Spoil pile samples: TPH=1,300 ppm, BTEX=ND.	A,B	3*
UST 442	442	442	1959	110 Steel	Fuel oil	Removed (4)	AP removed a 110 gal steel fuel oil tank in 1993.		LC	1993	Unknown	X	1 soil sample collected: TPH (Fuel Oil)=ND, BTEX=ND.	A,B,E	2*
UST 443	443	443	1959	1,000 Steel	Diesel	Removed (4)	AP removed a 1,000 gal steel tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	3 soil samples collected: TPH (Fuel Oil)=150-16,300 ppm, TRPH=16,300, BTEX=ND.	A,B,E	6
UST 449	449	449	1959	3,000 Steel	Fuel oil	Removed (4)	AP removed a 3,000 gal steel tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	4 soil samples collected: TPH (Fuel Oil)=12-12,200 ppm, X=30 ppb.	A,B,E	6

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UST 450	450	450	1959	3,000 Steel	Diesel	Removed (4)	AP removed a 3,000 gal steel tank in 1993.		LC	1993	Unknown	X	4 soil samples collected: TPH=ND, BTEX=ND.	A,B,E	2*
UST 451	451	451	1959	3,000 Steel	Diesel	Removed (4)	AP removed a 3,000 gal steel tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	4 soil samples collected: TPH (Fuel Oil)=170-9,300 ppm, E=190 ppb, X=1,300 ppb.	A,B,E	6
UST 452	452	452	1959	3,000 Steel	Diesel	Removed (4)	AP removed a 3,000 gal steel tank in 1993.		LC	1993	Unknown	X	4 soil samples collected: TPH (Fuel Oil)=47 ppm, BTEX=ND.	B,E	3*
UST 453	453	453	1960	1,500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: Supply and return lines have been disconnected outside the building.	Tank scheduled for removal in 1996 per UST Tiger Team.	S		Unknown			A,B	7
UST 454	454	454	1960	1,500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: Supply and return lines have been disconnected outside the building.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Unknown			A,B	7
UST 455	455	455	1960	1,500 Steel	Diesel	Removed (1)	From JEG report: UST removed 10/17/91; found UST filled with sand; excavation was backfilled and seeded with grass.	JEG report recommends closure to be considered final.	LC	1991	Sand	X	TPH and BTEX not detected in samples.	A,B	2*
UST 457	457	457	1960	2,000 Steel	Diesel	Removed (4)	AP removed a 2,000 gal steel tank in 1993.		LC	1993	Unknown	X	3 soil samples collected: TPH=ND, BTEX=ND.	A,B,E	2*
UST 461	461	461	1960	550 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 137-NFA. AP removed a 550 gal fiberglass tank in 1993.	No further action recommended in the RFA based on soil sample results.	LC	1993	Unknown	X	Tank removal soil sample results not available.	A,B,C,E	7
UST 462	462	462	1960	550 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 139-NFA. AP removed a 550 gal fiberglass tank in 1993.	No further action recommended in the RFA based on soil sample results.	LC	1993	Unknown	X	Tank removal soil sample results not available.	A,B,C,E	7
UST 463	463	463	1960	1,500 Steel	Diesel	Removed (4)	From RFA: SWMU 249-NFA; received waste oil from OWS 845 (SWMU 248). AP removed a 1,500 gal steel tank in 1993.	No further action recommended in the RFA based on soil sample results.	LC	1993	Sand	X	5 soil samples collected: TPH (Fuel Oil)=40-5,400 ppm, T=20 ppb, X=30 ppb.	A,B,C,E	6
UST 493	493	493	1944	1,500 Concrete	Diesel	Inactive	From RFA: SWMU 143-not sampled; unable to locate tank; building no longer exists.		NL	1987	Unknown			A,B,C	7
UST 529	529	529	1944	25,000 Concrete	Waste Oil	Inactive	From RFA: SWMU 145 - FA.	Tank scheduled for removal in 1996 per UST Tiger Team. Additional borings recommended in the RFA.	LC		Waste oil	X	RFA Results: 2-60' borings: TRPH = 1,575 - 27,525 ppm T = 570 J - 2,100 ppb X = 4,100 - 13,000 ppb E = 360 J - 1,900 ppb	A,B,C	6
UST 553	553	553	1956	10,000 Steel	Gasoline	Removed (4)	From 1993 Station UST Inventory: Contents of tank listed as diesel. AP removed a 10,000 gal steel gasoline tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Gasoline	X	2 soil samples collected: TPH (Gasoline)=260 ppm, BTEX=ND.	A,B,E,G	6
UST 554	554	554	1956	10,000 Steel	Kerosene	Removed	From 1993 Station UST Inventory: Contents of tank listed as diesel. AP removed a 10,000 gal steel kerosene tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Kerosene	X	2 soil samples collected: TPH (Kerosene)=6,000 ppm, BTEX=ND.	A,B,E,G	6
UST 568	568	568	1956	500 Steel	Diesel	Active		An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	SB		Unknown			B,I	7

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UST 574	574	574	1955	25,000 Cylindrical Concrete	JP-5	Removed	From 1993 Station UST Inventory: Removed and replaced with another UST. According to El Toro staff, USTs 398, 574, 575, 576, & 577 were replaced by USTs 902A, B, & C.		LC	1993	JP-5	Unknown		A,B,H	7
UST 575	575	575	1955	25,000 Cylindrical Concrete	JP-5	Removed	From 1993 Station UST Inventory: Removed and replaced with another UST on 2/93. According to El Toro staff, USTs 398, and 574 - 577 were replaced by USTs 902A, B, & C.		LC	1993	JP-5	Unknown		A,B,H	7
UST 576	576	576	1955	25,000 Cylindrical Concrete	JP-5	Removed	From 1993 Station UST Inventory: Removed and replaced with another UST on 2/93. According to El Toro staff, USTs 398, and 574- 577 were replaced by USTs 902A, B, & C.		LC	1993	JP-5	Unknown		A,B,H	7
UST 577	577	577	1955	25,000 Cylindrical Concrete	JP-5	Removed	From 1993 Station UST Inventory: Removed and replaced with another UST on 2/93. According to El Toro staff, USTs 398, and 574- 577 were replaced by USTs 902A, B, & C.		LC	1993	JP-5	Unknown		A,B	7
UST 579	579	579	1957	320 Steel	Unknown	Removed (4)	AP removed a 320 gal steel tank in 1993.		LC	1993	Unknown	X	3 soil samples collected: TPH=ND, BTEX=ND.	A,B,E	2*
UST 581	581	581	1945	550 Steel	Diesel	Removed (4)	AP removed a 550 gal steel tank in 1993.		LC	1993	Unknown	X	3 soil samples collected: TPH (Fuel Oil)=52-920, BTEX=ND.	A,B,E	3*
UST 610	610	610	1986	300 Steel	Gasoline	Removed (4)	AP removed a 300 gal steel gasoline tank in 1993.		LC	1993	Sand	X	2 soil samples collected: TPH=ND, BTEX=ND.	A,B,E	2*
UST 619	619	619	1986	Unknown Steel	Diesel	Unknown		Tank scheduled for removal in 1996 per UST Tiger Team.	S		Diesel			B	7
UST 625	625	625	1987	500 CPS	Waste Oil	Inactive	From RFA: SWMU 158-not sampled; located within RI/FS Site 20 boundaries. From 1993 Station UST Inventory: Visually stained soil observed around fill pipe during a field inspection conducted on 7/21/93.	Stained soil observed around the fill pipe per 1993 Station UST Inventory. Further investigation may be required at this site. Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Waste oil			A,B,C	7
UST 627	627	627	Unknown	Unknown Fiberglass	Diesel	Active	FAA Tank				Unknown			A,B	7
UST 634	634	634	1989	10,000 Steel	Fuel oil	Removed (4)	From 1993 Station UST Inventory: UST 634 contents listed as Unleaded gasoline. AP removed a 10,000 gal steel tank in 1993.		LC	1993	Unknown	X	Tank removal soil sampling results not available.	A,B,E	7
UST 636	636	636	1969	500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: Supply and return lines have been disconnected in the boiler room.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1987	Unknown			A,B	7
UST 637-1	637-1	637	1969	12,000 Steel	Leaded	Active		A leak detection monitoring system was installed per El Toro staff comments.	LC		Unleaded			A,B,I	7

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UST 637-2	637-2	637	1969	12,000 Steel	Premium	Active		A leak detection monitoring system was installed per El Toro staff comments.	LC		Unleaded			A,B,I	7
UST 637-3	637-3	637	1969	12,000 Steel	Unleaded	Active		A leak detection monitoring system was installed per El Toro staff comments.	LC		Unleaded			A,B,I	7
UST 651-1	651-1	651	1971	12,000 Steel	Unleaded	Active		An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	LC		Unleaded			A,B,I	7
UST 651-2	651-2	651	1971	12,000 Steel	Unleaded	Active		An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	LC		Unleaded			A,B,I	7
UST 651-3	651-3	651	1971	12,000 Steel	Unleaded	Active		An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	LC		Gasoline			A,B,I	7
UST 651-4	651-4	651	1971	12,000 Steel	Unleaded	Active		An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	LC		Gasoline			A,B,I	7
UST 651-5	651-5	651	1971	500 Steel	Waste oil	Active	From RFA: SWMU 166-not sampled; a dark circular stain extends ~6 in. around metal cover.	An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	LC		Motor oil			A,B,C,I	7
UST 651-6	651-6	651	1971	500 Steel	Waste oil	Active	From RFA: SWMU 167-not sampled; stained asphalt around fill box noted.	An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	LC		Motor oil			A,B,C,I	7
UST 651-7	651-7	651	1971	500 Steel	Waste oil	Active	From RFA: SWMU 168-not sampled; stains on pavement around fill box noted; extends to asphalt pavement bordering the fill box concrete pad.	An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	LC		Waste oil			A,B,C,I	7
UST 655	655	655	1984	2,000 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 250-NFA; darkly stained pavement around fill box; contents identified as waste oil. AP removed a 2,000 gal fiberglass tank in 1993.	No further action recommended in the RFA based on soil sample results.	LC	1993	Sand	X	3 soil samples collected: TPH=ND, BTEX=ND.	A,B,C,E	2*
UST 662	662	662	1973	10,000 Steel	Fuel oil	Removed (4)	AP removed a 10,000 gal fiberglass tank in 1993.		LC	1993	Unknown	X	3 soil samples collected: TPH=ND, BTEX=ND.	B,E,G	2*
UST 672	672	672	1972	500 Steel	Waste JP-5	Active	From RFA: SWMU 174-not sampled; not found during VSI.	An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	SB		Waste JP-5			A,B,C	7
UST 674A	674A	674	1982	500 Steel	Waste oil	Active	From RFA: SWMU 187-NFA; tank material listed as concrete. From 1993 Station UST Inventory: Tank material listed as steel; Receives waste oil from SWMU 189, the Bee Canyon OWS.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-60' boring: TRPH = 37 ppm VOCs < CRDL	A,B,C	7

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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 675A	675A	675	1982	500 Concrete	Waste oil	Active	From RFA: SWMU 188-NFA; receives waste oil from SWMU 292, the Agua Chino Wash OWS.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-60' boring: TRPH = 47 - 179 ppm TCE = 26 ppb	A,B,C	7
UST 706	706	706	1984	100 Steel	Diesel	Removed (5)	From RFA: SWMU 191-not sampled; tank not found during VSI; RFA recommends no further action. Building demolished.		NL	1987	Unknown			A,B,C	7
UST 70	70	718	1943	500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: UST located under Building 718 on 12-4-91. Tank couldn't be removed.		S	1974	Sand			A,B	7
UST 72	72	718	1943	500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: UST located under Building 718 on 12-4-91. Tank couldn't be removed.		S	1974	Sand			A,B	7
UST 718	718	718	1978	4,000 Fiberglass	Fuel oil	Removed (4)	AP removed a 4,000 gal fiberglass tank in 1993.		LC	1993	Unknown	X	1 soil sample collected: TPH=ND, BTEX=ND.	A,B,E	2*
UST 724A	724A	724	Unknown	1,000 Steel	Diesel	Unknown	Building demolished.	Tank scheduled for removal in 1996 per UST Tiger Team.	NL		Diesel			B	7
UST 730	730	730	1978	1,000 Fiberglass	Diesel	Active	Field inspection conducted on 7/22/93.	An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	LC		Diesel			A,B,I	7
UST 761B	761B	761	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 206-comb w/SWMU 205-NFA; receives waste oil from OWS 761A.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = ND VOCs < CRDL	A,B,C	7
UST T-9	T-9	779	1988	2,000 Fiberglass Coated Steel	JP-5	Active	From RFA: SWMU 228-not sampled; NFA recommended because the tank has been installed recently and there is no evidence of a release. Instituted leak detection monitoring in-place. From EG&G report: Tank is fuel slop tank near Bldg 779.		LC		Waste Fuel			A,B,C	7
UST 782	782	782	Unknown	Unknown Unknown	Unknown	Unknown	UST found by an OCHCA Inspector; tank is inactive. Per El Toro staff, tank is active and has no monitoring system in place.	Tank scheduled for removal in 1996 per UST Tiger Team.	SB		Unknown			A,B,H	7
UST 797	797	797	1985	10,000 Fiberglass	Aviation Gas	Active	This UST is a double-walled tank with a liquid probe in place according to El Toro staff.		LC		Aviation Gas			A,B,H	7
UST 800E	800E	800	1984	1,000 Fiberglass	Waste Oil	Active	From RFA: SWMU 231-NFA; tank failed tank test in 1990; concrete around fill box stained but soil does not appear impacted. EG&G report reports tank passed leak test on 2/23/90.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = 407 ppm (5' sample only) VOCs < CRDL	A,B,C,I	7

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UST 902A	902A	902	1993	50,000 Fiberglass Coated Steel	JP-5	Active	Located in a restricted area. Has a "Tank Watch" monitoring system. USTs 902A-C replaced UST 398.		SB		JP-5			A,B,G	7
UST 902B	902B	902	1993	50,000 Fiberglass Coated Steel	JP-5	Active	Located in a restricted area. Has "Tank Watch" monitoring system. USTs 902 A-C replaced UST 398.		SB		JP-5			A,B,G	7
UST 902C	902C	902	1993	2,500 Fiberglass Coated Steel	JP-5	Active	Used fuel separator. Has "Tank Watch" monitoring system. USTs 902 A-C replaced UST 398.		SB		JP-5			A,B,G	7
UST 5101	5101	5101	1943	500 Steel	Diesel	Inactive	Supplied fuel to boilers in Bldg 5101 & 5102.		SB		Unknown			A,B	7
UST 5102	5102	5102	1943	500 Steel	Fuel oil	Inactive			SB		Unknown			B	7
UST 5201	5201	5201	1943	300 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Sand			A,B	7
UST 5202	5202	5202	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5203	5203	5203	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5204	5204	5204	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5205	5205	5205	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5206	5206	5206	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5207	5207	5207	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5208	5208	5208	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5209	5209	5209	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5210	5210	5210	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		S	1990	Unknown		Soil sample results not available.	A,B	7
UST 5211	5211	5211	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		S	1990	Unknown		Soil sample results not available.	A,B	7
UST 5212	5212	5212	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1990	Unknown		Soil sample results not available.	A,B	7
UST 5213	5213	5213	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5214	5214	5214	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5215	5215	5215	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5216	5216	5216	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7

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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 5217	5217	5217	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5218	5218	5218	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5219	5219	5219	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5220	5220	5220	1943	300 Steel	Diesel	Inactive			S		Unknown			A,B	7
UST 5221	5221	5221	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		S	1990	Unknown		Soil sample results not available.	A,B	7
UST 5222	5222	5222	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		S	1990	Unknown		Soil sample results not available.	A,B	7
UST 5223	5223	5223	1943	300 Steel	Diesel	Inactive			S		Unknown			A,B	7
UST 5224	5224	5224	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5225	5225	5225	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5226	5226	5226	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5227	5227	5227	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5228	5228	5228	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5229	5229	5229	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5230	5230	5230	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5231	5231	5231	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5232	5232	5232	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5233	5233	5233	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5234	5234	5234	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5235	5235	5235	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5236	5236	5236	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5237	5237	5237	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		S	1990	Unknown		Soil sample results not available.	A,B	7
UST 5238	5238	5238	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		S	1990	Unknown		Soil sample results not available.	A,B	7
UST 5239	5239	5239	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7

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UST 5240	5240	5240	1943	300 Steel	Diesel	Removed	Tank removed and closed during the Irvine Relocation project in 1990 according to MCAS El Toro records.		S	1990	Unknown		Soil sample results not available.	A,B	7
UST 5241	5241	5241	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5242	5242	5242	1943	300 Steel	Diesel	Inactive		Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Unknown			A,B	7
UST 5243	5243	5243	1943	300 Steel	Diesel	Inactive			NL		Unknown			A,B	7
UST 105A	105A	105	1943	1,000 Steel	Fuel oil	Removed (5)	AP unable to locate tank during an exploratory excavation effort on 5/5/93. According to personnel at the Station's Installation Department, this tank was removed on 27 Nov 92.		SB		Sand			A,B,E	7
UST 105B	105B	105	1943	500 Steel	Diesel	Removed		No further investigation recommended in the 1993 Station UST Inventory because no soil contamination was discovered during UST removal.	S	1991	Sand	Unknown		A,B	7
UST 130A	130A	130	Unknown	1,500 Steel	Diesel	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	S		Unknown			A,B	7
UST 130B	130B	130	Unknown	1,500 Steel	Diesel	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	S		Unknown			A,B	7
UST 240A	240A	240	1944	8,000 Steel	Aviation Gas	Removed (5)	From 1993 Station UST Inventory: Tank was removed when tank 797 was installed.		SB	1985	Unknown			A,B	7
UST 240B	240B	240	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 65-NFA; receives waste oil from OWS 240C.	No further action recommended in the RFA based on soil sample results	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = ND VOCs < CRDL	A,B,C	7
UST 262A	262A	262	1944	2,600 Concrete	Diesel	Removed	From 1993 Station UST Inventory: Tank was removed on an unknown date; Tank filled with sand in 1979. El Toro contract records show tank removed 1990.		S	1990	Sand	Unknown		A,B	7
UST 262B	262B	262	1944	2,600 Concrete	Diesel	Removed	From 1993 Station UST Inventory: Tank was removed at an unknown date; Tank filled with sand in 1979. El Toro contract records show tank removed 1990.		SB	1990	Sand	Unknown		A,B	7
UST 271A	271A	271	1944	1,500 Concrete	Fuel oil	Removed (4)	AP removed a 1,500 gal concrete tank.		LC	1993	Sand	X	3 soil samples collected: TPH (Fuel Oil)=85-4,300 ppm, BTEX=ND.	A,B,E	6
UST 271B	271B	271	1944	Concrete	Fuel oil	Removed (4)	AP removed a 1,500 gal concrete tank.		LC	1993	Sand	X	3 soil samples collected: TPH (Fuel Oil)=300-5,000 ppm, BTEX=ND.	A,B,E	6
UST 271C	271C	271	1944	650 Concrete	Fuel oil	Removed (4)	AP removed a 650 gal concrete tank in 1993.		LC	1993	Sand	X	1 soil sample collected: TPH (Fuel Oil)=31 ppm, BTEX=ND.	A,B,E	3*

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UST 271D	271D	271	1944	650 Concrete	Fuel oil	Removed (4)	AP removed a 650 gal concrete tank in 1993.		LC	1993	Sand	X	1 soil sample collected: TPH (Fuel Oil)=3,400 ppm, BTEX=ND.	A,B,E	6
UST 278A	278A	278	1945	1,500 Concrete	Fuel oil	Inactive			S	1982	Sand			A,B	7
UST 278B	278B	278	1945	1,500 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1982	Sand			A,B	7
UST 297A	297A	297	1984	6,000 Fiberglass	Diesel	Removed (4)	From 1993 Station UST Inventory: UST removed 6/11/93. AP removed a 6,000+ gal fiberglass tank.		LC	1993	Unknown	X	2 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND, Trimethylbenzene=168 ppb.	A,B,E	3*
UST 297C	297C	297	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 77-comb w/SWMU 76-NFA; receives waste oil from OWS 297B	No further action recommended in the RFA based on soil sample results.	S		Waste oil	X	RFA Results: 1-25' boring: TRPH = 40 ppm VOCs < CRDL	A,B,C	7
UST 298A	298A	298	1944	3,000 Steel	Unleaded	Active		An automatic tank level monitoring system and spill containment were installed in 1993.	S		Unleaded			A,B,G,I	7
UST 298B	298B	298	1944	2,000 Steel	Diesel Fuel	Active	The automatic tank monitoring level system was not installed according to El Toro staff.		S		Diesel Fuel			A,B,G	7
UST 298D	298D	298	1982	185 Steel	Waste oil	Active	From RFA: SWMU 85-comb w/SWMU 84-FA; receives waste oil from OWS 298C. A new switching valve & box were installed in 2/94 according to El Toro staff.	Further investigation of the tank's current condition by leak testing and inspection is recommended.	LC		Unknown	X	RFA Results: 1-25' boring: TRPH = 901 J ppm VOCs < CRDL	A,B,C,H	7
UST 314A	314A	314	1945	50,000 Concrete	Diesel	Inactive	SWMU 91-NFA. Standing water in vault noted during inspection on 7/13/93. The UST still contained ~ 1000 gal of sludge. The tank is located on the west side of Bldg 314. According to El Toro staff, tank contents removed in January 1994.	Tank scheduled for removal in 1996 per UST Tiger Team. No further action recommended in the RFA based on soil sample results.	LC	1993	Waste oil	X	RFA Results: 1-60'; 1-25' boring TRPH = 86 - 249 ppm VOCs < CRDL	A,B,C,G,H	7
UST 314B	314B	314	1945	50,000 Concrete	Diesel	Inactive	SWMU 92-NFA. Standing water noted in vault during inspection on 7/13/93. The UST still contained ~ 1000 gal of sludge. The tank is located on the west side of Bldg 314. According to El Toro staff, tank contents were removed in January 1994.	Tank scheduled for removal in 1996 per UST Tiger Team. No further action recommended in the RFA based on soil sample results.	LC	1993	Waste oil	X	RFA Results: 2-60' borings TRPH = 69 - 416 ppm VOCs < CRDL	A,B,C,G	7
UST 322B	322B	322	Unknown	530 Steel	Diesel	Removed (4)	From RFA: SWMU 282-NFA. From 1993 Station UST Inventory: UST removed 5/20/93. AP removed a 530 gal steel tank.	No further action recommended in the RFA based on soil sample results.	LC	1993	Unknown	X	3 soil samples collected: TPH (Fuel Oil)=16-38,000 ppm, T=880 ppb, E=720 ppb, X=4,900 ppb.	A,B,C,E	6
UST 324A	324A	324	1945	8,000 Steel	JP-5	Inactive	From 1993 Station UST Inventory: Vent is capped.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Unknown			A,B	7
UST 324B	324B	324	1945	8,000 Steel	JP-5	Removed (4)	From 1993 Station UST Inventory: Vent is capped.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Unknown			A,B	7
UST 324C	324C	324	1945	8,000 Steel	JP-5	Inactive	From 1993 Station UST Inventory: Vent is capped.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Unknown			A,B	7

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UST 324D	324D	324	1945	8,000 Steel	JP-5	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Unknown			A,B	7
UST 324E	324E	324	1984	2,000 Fiberglass	Diesel	Removed (4)	From 1993 Station UST Inventory. UST removed 5/20/93. AP removed a 2,000 gal fiberglass tank in 1993.	Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1993	Unknown	X	3 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND.	A,B,E	2*
UST 326A	326A	326	1945	1,700 Steel	JP-5	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Unknown			A,B	7
UST 326B	326B	326	1945	Unknown Steel	JP-5	Inactive	From RFA: SWMU 283-NFA.	Tank scheduled for removal in 1996 per UST Tiger Team. No further action recommended in the RFA based on soil sample results.	LC		Unknown	X	RFA Results: 1-25' boring: TRPH (gas/diesel) = ND VOCs < CRDL	A,B,C	7
UST 337A	337A	337	1946	2,600 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1985	Sand			A,B	7
UST 337B	337B	337	1948	2,600 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1985	Sand			A,B	7
UST 347A	347A	347	1948	5,000 Steel	Gasoline	Removed (4)	AP removed a 5,000 gal steel tank in 1993.		LC	1993	Sand	X	3 soil samples collected: TPH (Gasoline)=5,600 ppm, B=82,000 ppb, T=320,000 ppb, E=120,000 ppb, X=650,000 ppb.	A,B,E	6
UST 347B	347B	347	1948	7,500 Steel	Gasoline	Removed (4)	AP removed a 7,500 gal steel tank in 1993.		LC	1993	Sand	X	1 soil sample collected: TPH (Gasoline)=ND, BTEX=ND.	A,B,E	2*
UST 347C	347C	347	1948	10,000 Steel	Gasoline	Removed (4)	AP removed a 10,000 gal steel tank in 1993.		LC	1993	Sand	X	3 soil samples collected: TPH (Gasoline)=4,000 ppm, B=20,000 ppb, T=180,000 ppb, E=78,000 ppb, X=380,000 ppb.	A,B,E	6
UST 347D	347D	347	1948	300 Steel	Waste oil	Removed (4)	From RFA: SWMU 284 - not sampled. AP removed a 300 gal steel waste oil tank in 1993.		LC	1993	Unknown	X	Tank removal soil sample results not available.	A,B,E	7
UST 359A	359A	359	1984	1,000 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 303-NFA. AP removed a 1,000 gal fiberglass tank.	No further action recommended in the RFA based on soil sample results.	LC	1993	Unknown	X	3 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND.	A,B,C,E	2*
UST 359C	359C	359	1982	500 Fiberglass	Haz. Waste	Removed (4)	From RFA: SWMU 102 - NFA. AP removed a 500 gal fiberglass tank in 1993.		LC	1993	Spent Solv	X	3 soil samples collected: TRPH=47-72 ppm, BTEX=ND; carbon tetrachloride=12 ppb. 1 sample inside tank: TPH(C7-C28 range)=66,500 ppm.	A,B,E	6
UST 364A	364A	364	1952	2,000 Steel	Fuel oil	Removed (4)	AP removed a 2,000 gal steel tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	3 soil samples collected: TPH (Fuel Oil)=95-40,000 ppm, T=2,100 ppb, E=800 ppb, X=11,000 ppb.	A,B,E	6
UST 364B	364B	364	1952	5,300 Steel	Fuel oil	Removed (4)	AP removed a 5,300 gal steel fuel oil tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	These results are for 3 soil samples with identifier 364 (assumed to refer to 364B): TPH(Fuel Oil)=95-40,000 ppm, T=2,100 ppb, X=2,100 ppb, E=800 ppb.	A,B,E	6

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UST 372A	372A	372	1954	1,000 Steel	Diesel	Active	From 1993 Station UST Inventory: Field inspection conducted on 7/28/93 discovered the tank was located in a restricted area. This tank was excluded from the AP tank removal contract.	An automatic tank monitoring level system and spill containment were installed in 1993.	LC		Fuel oil			A,B,E,I	7
UST 372B	372B	372	1954	2,500 Steel	Diesel	Removed (4)	AP removed a 2,500 gal steel tank; fill lines were left in place due to natural gas line interference.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	5 soil samples collected: TPH (Fuel Oil)=170 ppm, BTEX=ND.	A,B,E	3*
UST 374A	374A	374	1954	42,000 Concrete	Diesel	Removed (4)	From RFA: SWMU 263-NFA; Darkly stained soil noted; tank appeared full of a black and yellow liquid. AP removed a 42,000+ gal concrete tank in 1993.	No further action recommended in the RFA based on soil sample results. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	4 soil samples collected: TPH (Fuel Oil)=30-65 ppm, BTEX=ND.	A,B,C,E	3*
UST 374B	374B	374	1954	10,000 Steel	Diesel	Removed	AP removed a 10,000 gal steel tank in 1993.		LC	1993	Unknown	X	3 soil samples collected: TPH (Diesel)=2,300-13,000 ppm, B=2,500 ppb, T=5,400 ppb, X=40,000 ppb.	A,B,E	6
UST 380A	380A	380	1954	10,500 Steel	Diesel	Removed (4)	From 1993 Station UST Inventory: UST removed 7/22/93. AP removed a 10,500 gal steel tank in 1993; noted that there was only one tank.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	5 soil samples collected: TPH (Diesel)=320-15,000 ppm, BTEX=ND.	A,B,E	6
UST 380B	380B	380	1954	600 Steel	Motor Gas	Removed	Per OCHCA letter dated 23 May 1994: 380B was not found during removal of 380A. It was suspected that 380B was an aboveground "day tank" associated with 380A. This has not been confirmed.		Unknown		Unknown			A,B	7
UST 386A	386A	386	1984	1,000 Fiberglass	Diesel	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC		Waste oil			A,B	7
UST 386C	386C	386	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 113-comb w/SWMU 112-NFA; receives waste oil from OWS 386B.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-60" boring: TRPH = ND VOCs < CRDL	A,B,C	7
UST 388A	388A	388	1955	500 Steel	Diesel	Removed (4)	Per OCHCA: Suspected that steel tank was removed and replaced with double-wall fiberglass tank in 1988. AP removed a 500 gal tank in 1993.		LC	1973	Unknown	X	2 soil samples collected: TPH=ND, BTEX=ND.	A,B,E	2*
UST 388B	388B	388	1955	2,000 Steel	Diesel	Active	From RFA: SWMU 117 - not sampled. Tank has a liquid probe according to El Toro staff. Per OCHCA: Suspected that steel tank was removed and replaced with a double-wall fiberglass tank in 1988.		S		Unknown			A,B,G,H	7

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Underground Storage Tank Inventory
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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 390A	390A	390	1955	550 Steel	Diesel	Removed (4)	AP removed a 550+ gal steel tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	1 soil sample collected: TPH (Fuel Oil)=18 ppm, E=520 ppb, X=12,000 ppb.	A,B,E	6
UST 390B	390B	390	1955	2,000 Steel	Diesel	Removed (4)	AP removed a 2,000 gal steel tank in 1993.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Unknown	X	4 soil samples collected: TPH (Gasoline)=1,400 ppm, T=2,000 ppb, E=10,000 ppb, X=89,000 ppb.	A,B,E	6
UST 392A	392A	392	1955	550 Steel	Diesel	Active	From RFA: SWMU 298-FA; darkly stained soil noted. AP removed 550 gal steel tank in 1993. According to El Toro staff, a 2,000 gal double-walled fiberglass fuel oil tank with a liquid probe was installed after tank was pulled in 1993.	Further investigation of the newly-installed tank's current condition by leak testing and inspection is recommended.	LC	1993	Waste oil	X	2 soil samples collected: TPH (Fuel Oil)=ND, BTEX=ND.	A,B,C,E,H	7
UST 392B	392B	392	1955	2,000 Steel	Diesel	Active	OCHCA suspects that this tank was removed in 1988 and replaced with a double-wall fiberglass tank. Needs additional investigation.		S		Unknown			A,B	7
UST 392C	392C	392	Unknown	Unknown Steel	Diesel	Unknown	OCHCA suspects that this tank was removed in 1988 and replaced with a double-wall fiberglass tank. Needs additional investigation.		S		Sand			A,B	7
UST 439A	439A	439	1959	5,000 Steel	Fuel oil	Removed (4)	AP removed a 5,000 gal steel fuel oil tank in 1993.		LC	1993	Unknown	X	2 soil samples collected: TPH (Fuel Oil)=22-49 ppm, BTEX=ND.	A,B,E	3*
UST 439B	439B	439	1959	5,000 Steel	Fuel oil	Removed (4)	AP removed a 5,000 gal steel fuel oil tank.		LC	1993	Unknown	X	These results are for 2 soil samples with identifier 439 (assumed to refer to 439B): TPH(Diesel)=43 ppm, BTEX=ND.	A,B,E	3*
UST 445A	445A	445	1959	10,000 Steel	Unknown	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1990	Unknown			A,B,C	7
UST 445B	445B	445	1959	10,000 Steel	JP-5	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	LC	1990	Unknown			A,B	7
UST 445C	445C	445	1959	100 Steel	Waste oil	Inactive	From RFA: SWMU 129-NFA; stain on unpaved soil near pump units.	Tank scheduled for removal in 1996 per UST Tiger Team. No further action recommended in the RFA based on soil sample results.	LC	1990	Unknown	X	RFA Results: 1-25' boring: TRPH = ND T = 19 ppb	A,B,C	7
UST 447A	447A	447	1959	10,000 Steel	JP-5	Active	Tank contained JP-5 according to El Toro personnel.	An automatic tank monitoring level system and spill containment were installed in 1993.	S		JP-5			A,B,G,I	7
UST 447B	447B	447	1959	10,000 Steel	JP-5	Active	Tank contained JP-5 according to El Toro personnel.	An automatic tank monitoring level system and spill containment were installed in 1993.	S		JP-5			A,B,G,I	7
UST 47A	47A	47	1943	1,500 Steel	Diesel	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	S		Sand			A,B	7
UST 47C	47C	47	1943	500 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	SB		Sand			A,B	7
UST 47B	47B	47	1943	1,500 Steel	Diesel	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	S		Sand			A,B	7

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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 473A	473A	473	1943	1,500 Steel	Diesel	Inactive	Building demolished. Location of UST unknown.		NL	1971	Unknown			A,B	7
UST 473B	473B	473	1943	1,500 Steel	Diesel	Inactive	Building demolished. Location of UST unknown.		NL	1971	Unknown			A,B	7
UST 54A	54A	54	1943	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed 2/4/92. Tank found empty. Excavation was lined with LDPE liner and backfilled with washed concrete sand.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1992	Unknown	X	TPH levels in soils around the tank were : 19,000 ppm (2' under tank). Other samples were non-detect. BTEX detected in sample taken from under tank only. B=18 ppb, T=185 ppb, X=827 ppb, E= 141 ppb.	A,B,D	6
UST 54B	54B	54	1943	500 Steel	Diesel	Removed (5)		Tank scheduled for removal in 1996 per UST Tiger Team.	S		Unknown			A,B	7
UST 55A	55A	55	1943	5,000 Steel	Unknown	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	NL		Unknown			A,B	7
UST 55B	55B	55	1943	5,000 Steel	Unknown	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	NL		Unknown			A,B	7
UST 56A	56A	56	1943	1,400 Steel	Diesel	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	SB		Sand			A,B	7
UST 56B	56B	56	1943	1,400 Steel	Fuel oil	Removed (5)	AP unable to locate tank.		SB		Sand			A,B,E	7
UST 56C	56C	56	1943	500 Steel	Diesel	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	SB		Sand			A,B	7
UST 605A	605A	605	1965	1,700 Steel	Diesel	Removed	From JEG report: UST removed 10/8/91; excavation backfilled and resurfaced with asphalt.	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final.	LC	1991	Unknown	X	TPH and BTEX not detected in samples taken from the excavation. Spoil sample had a TPH=14 ppm, BTEX=ND.	A,B	3*
UST 605B	605B	605	1965	500 Steel	Diesel	Removed (5)			SB	1987	Unknown			A,B	7
UST 606A	606A	606	1965	1,700 Steel	Diesel	Removed	From 1993 Station UST Inventory: UST removed 10/8/91; Excavation backfilled and resurfaced with asphalt.	Soil results indicate no soil contamination according to the JEG tank closure report. JEG report recommends closure to be considered final.	LC	1991	Unknown	X	TPH and BTEX not detected in samples taken from the excavation. Spoil sample had a TPH=42 ppm, BTEX=ND.	A,B	3*
UST 606B	606B	606	1965	500 Steel	Diesel	Inactive			SB	1987	Unknown			A,B	7
UST 643A	643A	643	1982	185 CPS	Waste oil	Active	From RFA: SWMU 162-NFA - might be same as tank 696.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = NO VOCs < CROD	A,B,C	7
UST 65A	65A	65	1943	1,000 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: In 1987 Survey tank size listed as 1400 gal; in the EPA registration form the tank size is listed as 1000 gal.	Tank scheduled for removal in 1996 per UST Tiger Team.	S		Sand			A,B	7
UST 65B	65B	65	1943	2,000 Concrete	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	SB		Sand			A,B	7
UST 658A	658A	658	1972	10,000 Steel	JP-5	Active		An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	LC		JP-5			A,B,I	7

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LOC Reference	Tank No.	Nearast Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 658B	658B	658	1972	10,000 Steel	JP-5	Active		An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	LC		JP-5			A,B,I	7
UST 66A	66A	66	1943	1,100 Steel	Diesel	Removed	UST 66A listed as a 1,500 gal steel tank in 1993 Station UST Inventory. AP removed a 1,100 gal steel tank; bottom of excavation = 8 ft.	Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1993	Sand	X	4 soil samples collected: TPH(Fuel Oil)=360-1,300 ppm; BTEX=ND.	A,B,E	6
UST 66B	66B	66	1943	1,500 Steel	Diesel	Inactive	AP unable to locate tank.		SB		Unknown			A,B,E	7
UST 67A	67A	67	1943	1,500 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	S	1978	Sand			A,B	7
UST 67B	67B	67	1943	1,500 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	S	1978	Sand			A,B	7
UST 672B	672B	672	1972	1,000 Steel	Waste Oil	Active	From RFA: SWMU 176-FA; asphalt eroded and stained around tank cover. From 1993 station UST Inventory: Release due to improper filling procedure. Area has been cleaned up.	RFA recommended additional borings.	LC		Waste oil	X	RFA Results: TRPH = 5,495 - 18,136 ppm TPH (gas) = 921 - 2,540 ppm TPH (diesel) = 87 -26,700 ppm T = 120 - 3,300 ppb X = 6,000 - 39,000 ppb E = 740 - 7,800 ppb	A,B,C	6
UST 673B	673B	673	1982	300 Steel	Waste oil	Active	From RFA: SWMU 180-comb w/SWMU 179-NFA; stains on asphalt near tank.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = ND VOCs < CRDL	A,B,C	7
UST 693A	693A	693	1975	500 Steel	Diesel	Removed	From JTL report: Tank removed 12/23/91 and was found empty. Excavation backfilled with washed concrete sand and original soil.	Soil results indicate no soil contamination according to the JTL tank closure report. JTL report recommends closure to be considered final.	LC	1991	Unknown	X	TPH not detected in all samples. Highest BTEX level detected in sample taken from under tank: X=7 ppb.	A,B,D	3*
UST 693B	693B	693	1975	500 Steel	Diesel	Removed (1)	From JTL report: Tank removed 12/23/91 and was found empty. Excavation backfilled with washed concrete sand and original soil.	JTL report recommends closure to be considered final.	LC	1991	Unknown	X	TPH and BTEX not detected in all samples.	A,B,D	2*
UST 716A	716A	716	1976	3,000 Steel	Waste oil	Active	From RFA: SWMU 192-not sampled; tank material listed as fiberglass; used to store waste oil from OWS 716B. Tank material listed as steel in 1993 Station UST Inventory.	An automatic tank monitoring level system and spill containment were installed per information provided by IT Corp in January 1994.	LC		Wastewater			A,B,C,I	7
UST 733A	733 A	733	1980	10,000 Fiberglass	Diesel	Removed (4)	AP removed a 10,000 gal fiberglass tank in 1993.		LC	1993	Unknown	X	Tank removal soil sampling results not available.	A,B,E	7
UST 733B	733 B	733	1980	10,000 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 286-NFA. AP removed a 10,000 gal fiberglass tank in 1993.	No further action recommended in the RFA based on soil sample results.	LC	1993	Unknown	X	Tank removal soil sampling results not available.	A,B,C,E	7
UST 733C	733 C	733	1980	10,000 Fiberglass	Diesel	Removed (4)	From RFA: SWMU 287-NFA. AP removed a 10,000 gal fiberglass tank in 1993.	No further action recommended in the RFA based on soil sample results.	LC	1993	Unknown	X	Tank removal soil sampling results not available.	A,B,C,E	7

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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 75A	75A	75	1943	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed 12/13/91. Tank found full of fuel oil. Excavation lined with visqueen liner and backfilled with clean sand.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Unknown	X	TPH levels in soils around tank were : 80,000 ppm for the spoil pile, other samples non-detect. Highest BTEX level in sample from spoil pile: B=94 ppb, T=1230 ppb, X=4160 ppb, E=848 ppb.	A,B,D	6
UST 75B	75B	75	1943	500 Steel	Diesel	Removed (3)	From JTL report: Tank removed 12/13/91. Tank found full of fuel oil. Excavation was backfilled with contaminated spoil, lined with LDPE liner, and backfilled with clean sand.	Further investigation of vertical and lateral extent of contamination recommended in JTL tank closure report. Sample results are being evaluated by CLEAN II contractor for potential further action.	LC	1991	Unknown	X	TPH levels in soils around tank were : 2,900 ppm (2' under tank) and 9,700 and 28 ppm (south and north side of excavation), other samples non-detect BTEX detected in spoil sample only: X=12 ppb.	A,B,D	6
UST 75C	75C	75	1943	500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: Tank is located under 2 ft concrete dock supporting mechanical units.		S		Unknown			A,B	7
UST 758B	758B	758	1982	185 Steel		Active	From RFA: SWMU 197-comb w/SWMU 196-NFA; stores waste oil from OWS 758A.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = ND VOCs < CRDL	A,B,C	7
UST 759B	759B	759	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 200-comb w/SWMU 199-FA; receives waste oil from OWS 759A.	Further investigation of the oil/water separator's current condition by leak testing and inspection is recommended in the RFA. No recommendations were available for the tank.	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = 669 ppm (15' sample only) VOCs < CRDL	A,B,C	7
UST 760A	760A	760	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 202-NFA; receives waste oil from OWS 760B.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = ND VOCs < CRDL	A,B,C	7
UST 763B	763B	763	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 212-comb w/SWMU 211-NFA; receives waste oil from 763A.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = ND VOCs < CRDL	A,B,C	7
UST 764A	764A	764	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 214-NFA; receives waste oil from 764B.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = ND VOCs < CRDL	A,B,C	7
UST 765A	765A	765	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 217; receives waste oil from 765B. A field inspection conducted on 7/22/93 found no visible evidence of a UST in the area.		LC		Waste oil			A,B,C	7
UST 766B	766B	766	1982	185 Steel	Waste Oil	Active	From RFA: SWMU 221-comb w/SWMU 220-NFA; receives waste oil from 766A. A field inspection conducted on 7/22/93 found no visible evidence of a UST in the area. Tank under repair/construction as of 2/94 according to El Toro staff.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 1-25' boring: TRPH = 268 ppm (10' sample only) VOCs < CRDL	A,B,C,H	7

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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 800A	800A	800	1984	10,000 Fiberglass	Diesel Fuel	Active			S		Diesel			A,B	7
UST 800B	800B	800	1984	10,000 Fiberglass	Kerosene	Active			S		Kerosene			A,B	7
UST 800C	800C	800	1984	10,000 Fiberglass	Diesel Fuel	Active			S		Diesel			A,B	7
UST 800D	800D	800	1984	1,000 Fiberglass	Waste Oil	Active	From RFA: SWMU 230-not sampled; concrete area around fill boxes stained due to filling and emptying of tank but does not appear soil has been impacted; recommended no further action.		S		Waste oil			A,B,C	7
UST 83A	83A	83	1943	1,500 Steel	Fuel oil	Removed (4)	AP removed a 1,500 gal steel tank; excavation depth = 8 ft.		LC	1993	Unknown	X	3 soil samples collected: TPH(Fuel Oil)=ND, BTEX=ND.	A,B,E	2*
UST 83B	83B	83	1943	1,500 Steel	Fuel oil	Removed (4)	This tank was removed under contract CTO168 in January 1994 per El Toro staff.		S		Unknown	X	3 soil samples collected: TPH (Fuel Oil)=73 ppm, BTEX=ND.	A,B,E	3*
UST 84A	84A	84	1943	1,500 Steel	Diesel	Inactive	From 1993 Station UST Inventory: Deactivated in 1978. Facility demolished in 1984.	Tank scheduled for removal in 1996 per UST Tiger Team.	S	1978	Unknown			A,B	7
UST 84B	84B	84	1943	1,500 Steel	Fuel oil	Inactive	From 1993 Station UST Inventory: Deactivated in 1978. Facility demolished in 1984.	Tank scheduled for removal in 1996 per UST Tiger Team.	S	1978	Sand			A,B	7
UST 850A	850 A	850	1988	5,000 Fiberglass	JP-5	Active	From RFA: SWMU 288-not sampled; within RI/FS Site 16 boundaries. Temporarily closed for repairs in 1990. El Toro staff did not know if a tank level monitor was in place at this UST.		LC		Unknown			A,B,C	7
UST 850B	850 B	850	1988	5,000 Fiberglass	JP-5	Active	From RFA: SWMU 289-not sampled; within RI/FS Site 16 boundaries. Temporarily closed for repairs in 1990. El Toro staff did not know if a tank level monitor was in place at this site.		LC		Unknown			A,B,C	7
UST 850C	850 C	850	1988	500 Fiberglass	JP-5	Active	From RFA: SWMU 290-not sampled; within RI/FS Site 16 boundaries. Temporarily closed for repairs in 1990.		LC		Unknown			A,B,C	7
UST 98A	98A	98	1943	1,500 Concrete	Fuel oil	Inactive	From 1993 Station UST Inventory: Deactivated and filled with sand in 1974.	Tank scheduled for removal in 1996 per UST Tiger Team.	S	1974	Sand			A,B	7
UST 98B	98B	98	1943	500 Steel	Fuel oil	Inactive		Tank scheduled for removal in 1996 per UST Tiger Team.	SB		Unknown			A,B	7
UST 186	186	TF 1	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From RFA: SWMU 275-NFA. From 1993 Station UST Inventory: Tank decommissioned in 1965. From interview with El Toro Tank Farm staff, this tank located under asphalt in the static aircraft display area.	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1965	Unknown	X	RFA Results: 2-60' borings: TRPH/TFH (gas), (Diesel) = ND VOCs<CRDL	A,B,C	7

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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 187	187	TF 1	1943	50,000 Cylindrical Concrete	Aviation Gas/JP-5	Inactive	From RFA: SWMU 276-NFA. From 1993 Station UST Inventory: Tank decommissioned in 1965. According to El Toro Tank Farm staff, UST located in static display area under the asphalt.	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1965	Unknown	X	RFA Results: 2-60' borings: TRPH = 192 ppm TPH (Diesel) = 300 VOCs = ND	A,B,C	7
UST 184	184	TF 1 (184)	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory: Tank decommissioned in 1965.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1965	Unknown			A,B	7
UST 185	185	TF 1 (185)	1943	50,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory: Tank decommissioned in 1965.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1965	Unknown			A,B	7
UST 176	176	TF 2 (242)	1943	25,000 Cylindrical Concrete	Av. Gas	Inactive	From 1993 Station UST Inventory: Deactivated in 8/93. The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, the El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	Wastewater			A,B,G,I	7
UST 177	177	TF 2 (242)	1943	50,000 Cylindrical Concrete	Av. Gas	Inactive	The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were scheduled to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1992/ 1993	Wastewater			A,B,G,I	7
UST 178	178	TF 2 (242)	1943	50,000 Cylindrical Concrete	Av. Gas	Inactive	From RFA: SWMU 48-NFA; stained soil near housing unit. The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were to be removed.	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1992/ 1993	Wastewater	X	RFA Results: 2-60' borings: TRPH = 822 ppm in 10' boring: 126 ppm in bottom VOCs<CRDL	A,B,G,I	7
UST 179	179	TF 2 (242)	1943	25,000 Cylindrical Concrete	Av. Gas	Inactive	From RFA: SWMU 49-NFA; soil stained near ends of a discarded fill hose. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a would not be installed because TF 2 tanks were to be removed.	No further action recommended in the RFA based on soil sample results.	LC	1992/ 1993	Wastewater	X	RFA Results: 2-60' borings: TRPH = 63 - 72 ppm VOCs<CRDL	A,B,G,I	7

**Table 3-7
Underground Storage Tank Inventory
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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 180	180	TF 2 (242)	1943	25,000 Cylindrical Concrete	Av.Gas	Inactive	From RFA: SWMU 51-not sampled; no evidence of a release; NFA recommended. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a would not be installed because TF 2 tanks were to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1992/ 1993	Wastewater			A,B,G,I	7
UST 181	181	TF 2 (242)	1943	50,000 Cylindrical Concrete	Av.Gas	Inactive	The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were scheduled to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1992/ 1993	Wastewater			A,B,G,I	7
UST 182	182	TF 2 (242)	1943	50,000 Cylindrical Concrete	Av.Gas	Inactive	From RFA: SWMU 52-not sampled; no evidence of a release; NFA recommended. The JEG Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a CVZME would not be installed because TF 2 tanks were to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1992/ 1993	Wastewater			A,B,G,I	7
UST 183	183	TF 2 (242)	1943	25,000 Cylindrical Concrete	Av.Gas	Inactive	The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were scheduled to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1992/ 1993	Wastewater			A,B,G,I	7
UST 188	188	TF 3	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From RFA: SWMU 277-NFA. From 1993 Station UST Inventory: Tank decommissioned in 1970.	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1970	None	X	RFA Results: 2-60' borings: TRPH = 1050 ppm (10' sample only) X = 43 ppb	A,B,C	7
UST 190	190	TF 3	1943	50,000 Cylindrical Concrete	Unknown	Inactive	From RFA: SWMU 278-NFA. From 1993 Station UST Inventory: Tank demolished in 1967. El Toro tank list identifies this tank as removed, however during the RFA this tank was determined to still be in place.	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1967	None	X	RFA Results: 2-60' borings: TRPH (gas/diesel) = ND VOCs<CRDL	A,B,C	7
UST 192	192	TF 3	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory: Tank demolished in 1970. El Toro tank list identifies this tank as removed, however during the RFA this tank was determined to still be in place.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1970	None			A,B	7

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Underground Storage Tank Inventory
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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 193	193	TF 3	1943	50,000 Cylindrical Concrete	Unknown	Inactive	From RFA: SWMU 279-NFA. From 1993 Station UST Inventory: Tank demolished in 1970. El Toro tank list identifies tank as removed, however during the RFA this tank was determined to still be in place.	No further action recommended in the RFA based on soil sample results. Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1970	None	X	RFA Results: 2-60' borings: TRPH (gas/diesel) = ND VOCs < CRDL	A,B,C	7
UST 194	194	TF 3	1943	50,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST inventory: Tank demolished in 1970. El Toro tank list identifies this tank as removed, however during the RFA this tank was determined to still be in place.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1970	None			A,B	7
UST 195	195	TF 3	1943	25,000 Cylindrical Concrete	Waste Fuel	Inactive	From RFA: SWMU 280-FA. From 1993 Station UST Inventory: Tank demolished in 1970. El Toro tank list identifies this tank as removed, however during the RFA this tank was determined to still be in place.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1970	Waste Fuel	X	RFA Results: 2-60' borings: TRPH = 592 - 1440 ppm (60' sample only) Gas = 2280 - 4880 ppm Diesel = 390 - 480 ppm X = 38,000 - 49,000 ppb E = 7,700 - 9,300 ppb	A,B,C,G	6
UST 219	219	TF 3	1943	50,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory: Tank demolished in 1970. During a geophysical survey conducted prior to the RFA field effort, these tanks were determined to still be in place.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1970	Unknown			A,B	7
UST 220	220	TF 3	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory: Tank demolished in 1970. During a geophysical survey conducted prior to the RFA field effort, these tanks were determined to still be in place.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1970	Unknown			A,B	7
UST 221	221	TF 3	1943	25,000 Cylindrical Concrete	Unknown	Inactive	From 1993 Station UST Inventory: Tank demolished in 1970. During a geophysical survey conducted prior to the RFA field effort, these tanks were determined to still be in place.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1970	Unknown			A,B	7
UST 189	189	TF 3 (272)	1943	50,000 Cylindrical Concrete	Waste Oil	Inactive	From RFA: SWMU 57-NFA. According to El Toro staff, contents of tank were emptied in January 1994.	No further action recommended in the RFA based on soil sample results.	LC		Waste oil	X	RFA Results: 2-60' borings: TRPH = 118 - 474 ppm VOCs < CRDL	A,B,C,G,H	7
UST 191	191	TF 3 (272)	1943	25,000 Cylindrical Concrete	Waste Oil	Inactive	From RFA: SWMU 59-NFA. According to El Toro staff, contents of tank were emptied in January 1994.	No further action recommended in the RFA based on soil sample results.	LC	1993	Waste oil	X	RFA Results: 2-60' borings: TRPH = 80 - 116 ppm VOCs < CRDL	A,B,C,G,H	7
UST 196	196	TF 4	1943	25,000 Cylindrical Concrete	Diesel	Inactive	From 1993 Station UST Inventory: Tank not needed and can be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	Waste Fuel			A,B,G	7

**Table 3-7
Underground Storage Tank Inventory
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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 197	197	TF 4	1943	50,000 Cylindrical Concrete	Diesel	Inactive	From 1993 Station UST Inventory: Tank not needed and can be removed. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a CVZME would not be installed because TF 4 tanks were to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	Waste Fuel			A,B,G,I	7
UST 198	198	TF 4	1943	50,000 Cylindrical Concrete	JP-5	Active	From 1993 Station UST Inventory: Tank not needed and can be removed. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a CVZME would not be installed because TF 4 tanks were to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Wastewater			A,B,G,I	7
UST 199	199	TF 4	1943	25,000 Cylindrical Concrete	JP-5	Inactive	From 1993 Station UST Inventory: Tank not needed and can be removed. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a CVZME would not be installed because TF 4 tanks were to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	Waste Fuel			A,B,G,I	7
UST 200	200	TF 4	1943	25,000 Cylindrical Concrete	JP-5	Inactive	The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were scheduled to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	JP-5			A,B,G,I	7
UST 201	201	TF 4	1943	50,000 Cylindrical Concrete	JP-4	Inactive	The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were scheduled to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	JP-5			A,B,G,I	7
UST 202	202	TF 4	1943	50,000 Cylindrical Concrete	JP-4	Inactive	The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were scheduled to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	JP-5			A,B,G,I	7

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Underground Storage Tank Inventory
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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 203	203	TF 4	1943	25,000 Cylindrical Concrete	JP-4	Inactive	The JEG Draft Monitoring Plan listed a CVZME was scheduled to be installed. However, El Toro Tank Farm staff reported that the CVZME would not be installed because TF 2 tanks were scheduled to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	JP-5			A,B,G,I	7
UST T-10	T-10	TF 4	1988	1,000 Fiberglass Coated Steel	JP-5	Active	From RFA: SWMU 108-not sampled; NFA recommended based on recent installation date. Insitu leak detection monitoring in-place. From EG&G report: Tank is fuel slop tank near Bldg 374.		LC		Waste Fuel			A,B,C	7
UST T-2	T-2	TF 4	1988	2,000 Fiberglass Coated Steel	Waste JP-5	Active	From RFA: SWMU 18-not sampled; tank normally empty since its used for spill containment; no evidence of release; NFA recommended. Insitu leak detection monitoring in-place. From EG&G report: Tank stores spilled fuel from TF-4.		LC		Waste JP-5			A,B,C	7
UST 216	216	TF 4 (1538)	1943	50,000 Cylindrical Concrete	Diesel	Inactive	From 1993 Station UST Inventory: Tank not needed and can be removed. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a CVZME would not be installed because TF 4 tanks were to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC		Diesel			A,B,G,I	7
UST 217	217	TF 4 (1538)	1943	25,000 Cylindrical Concrete	Diesel	Inactive	From 1993 Station UST Inventory: Tank not needed and can be removed. The JEG Draft Monitoring Plan listed a CVZME was to be installed. However, El Toro Tank Farm staff reported that a CVZME would not be installed because TF 4 tanks were to be removed.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	Diesel			A,B,G,I	7
UST 218	218	TF 4 (1538)	1943	25,000 Cylindrical Concrete	Diesel	Inactive	From 1993 Station UST Inventory: Tank not needed and can be removed. From Jake Kormos files: In 1981, tank was filled with unleaded fuel and leaked due to poorly installed tank coating.	A CVZME, listed in the JEG Draft Monitoring Plan, will not be installed according to El Toro Tank Farm staff. Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	Diesel			A,B,G,I	7

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Underground Storage Tank Inventory
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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST T-3	T-3	TF 4 (1538)	1988	2,000 Fiberglass Coated Steel	Waste JP-5	Active	From RFA: SWMU 19-not sampled; tank normally empty because its used for spill containment; no evidence of release; NFA recommended. Instituted leak detection monitoring in-place. From EG&G report: Tank stores spilled fuel from TF-4.		LC		Waste JP-5			A,B,C	7
UST T-5	T-5	TF 4 (242)	1988	2,000 Fiberglass Coated Steel	Waste JP-5	Active	From RFA: SWMU 17-not sampled; tank normally empty because its used for spill containment; no evidence of release; NFA recommended. Instituted leak detection monitoring in-place. From EG&G report: Tank stores spilled fuel from TF-2.		LC		Waste JP-5			A,B,C	7
UST 208	208	TF 5	1943	50,000 Cylindrical Concrete	Aviation Gas	Active		Continuous vadose zone monitoring equipment for leaks along with a catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.	LC		Diesel			A,B,G	7
UST 209	209	TF 5	1943	25,000 Cylindrical Concrete	Recycled Aviation Gas	Active		Continuous vadose zone monitoring equipment for leaks along with a catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.	LC		JP-5			A,B,G	7
UST 210	210	TF 5	1943	25,000 Cylindrical Concrete	Aviation Gas	Inactive	From 1993 Station UST Inventory: Tank demolished in 1970. According to El Toro Staff, tank was deactivated in 1972, not demolished; tank scheduled to be removed. From Jake Kormos files: In 1977, tank leaked due to tank coating applied out-of-spec.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1972	JP-5			A,B,G	7
UST 211	211	TF 5	1943	50,000 Cylindrical Concrete	Aviation Gas	Active		Continuous vadose zone monitoring equipment for leaks along with a catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.	LC		JP-5			A,B,G	7
UST 212	212	TF 5	1943	50,000 Cylindrical Concrete	Aviation Gas	Inactive	According to El Toro staff, tank has been out of use since 1972. From Jake Kormos files: Water leaked into tank through tank roof; not used to store fuel since 1977.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1972	JP-5			A,B,G	7

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Underground Storage Tank Inventory
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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 213	213	TF 5	1943	25,000 Cylindrical Concrete	Recycled Aviation Gas	Active		Continuous vadose zone monitoring equipment for leaks along with a catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.	LC		JP-5			A,B,G	7
UST 214	214	TF 5	1943	25,000 Cylindrical Concrete	Aviation Gas	Inactive	From Jake Kormos files: In 1977, tank leaked due to tank coating applied out-of-specs.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1990	JP-5			A,B,G	7
UST 215	215	TF 5	1943	50,000 Cylindrical Concrete	Aviation Gas	Active		Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.	LC		JP-5			A,B,G	7
UST T-6	T-6	TF 5	1988	2,000 Fiberglass Coated Steel	Aviation Gas	Active	From RFA: SWMU 21-not sampled; tank normally empty because its used for spill containment; no evidence of a release; NFA recommended. Institue leak detection monitoring in-place. From EG&G report: Tank stores spilled fuel from TF-5.		LC		Waste JP-5			A,B,C	7
UST T-8	T-8	TF 5,6 (779)	1988	2,000 Fiberglass Coated Steel	Waste JP-5	Active	From RFA: SWMU 22-not sampled; tank is a spill containment tank and is normally empty; no evidence of a release; NFA recommended. Institue leak detection monitoring in-place. From EG&G report: Tank stores spilled fuel from TF-5 & 6.		LC		Waste JP-5			A,B,C	7
UST T-1	T-1	TF 555	1988	2,000 Fiberglass Coated Steel	Waste JP-5	Active	From RFA: SWMU 23-not sampled; NFA recommended since tank normally is empty since its used for spill containment and there is no evidence of a release. Institue leak detection monitoring in-place. From EG&G report: Tank stores spilled fuel from TF-555.		LC		Waste JP-5			A,B,C	7
UST 547	547	TF 555 (547)	1953	567,000 Cylindrical Concrete	JP-5	Active	Vadose zone monitoring had readings of 440 ppm.	Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.	LC		JP-5			A,B,G,I	7
UST 548	548	TF 555 (547)	1953	567,000 Cylindrical Concrete	JP-5	Active		Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.	LC		JP-5			A,B,G,I	7

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Underground Storage Tank Inventory
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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 549	549	TF 555 (547)	1953	567,000 Cylindrical Concrete	JP-5	Active	Vadose zone monitoring had readings of 200 ppm.	Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.	LC		JP-5			A,B,G,I	7
UST 550	550	TF 555 (547)	1953	567,000 Cylindrical Concrete	JP-5	Active	Vadose zone monitoring had readings of greater than 3,500 ppm.	Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.	LC		JP-5			A,B,G,I	7
UST 551	551	TF 555 (547)	1953	567,000 Steel	JP-5	Active		Continuous vadose monitoring equipment for leaks along with catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.	LC		JP-5			A,B,G,I	7
UST 204	204	TF 6 (396)	1943	50,000 Cylindrical Concrete	R JP-5	Inactive	From RFA: SWMU 60-not sampled; since tank passed leak test and no evidence of release, NFA recommended. From 1993 Station UST Inventory: Tank not needed & can be removed; Deactivated 8/93. According to El Toro Tank Farm Staff, tank inactive for 10 years.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	R JP-5			A,B,C,G	7
UST 205	205	TF 6 (396)	1943	25,000 Cylindrical Concrete	R JP-5	Inactive	From RFA: SWMU 61-not sampled; since tank passed leak test and no evidence of release, NFA recommended. From 1993 Station UST Inventory: Tank not needed & can be removed; Deactivated 8/93. According to El Toro Tank Farm Staff, tank inactive for 10 years.	Tank scheduled for removal in 1995 per UST Tiger Team.	LC	1993	R JP-5			A,B,C,G	7
UST 206	206	TF 6 (396)	1943	50,000 Cylindrical Concrete	Premium Gas	Active	From RFA: SWMU 62 - not sampled; since tank passed leak test. Vadose zone monitoring had readings of greater than 3,500 ppm.	Continuous vadose zone monitoring equipment for leaks along with spill containment are scheduled to be installed at this site.	LC		Unleaded			A,B,C,G	7
UST 207	207	TF 6 (396)	1943	50,000 Cylindrical Concrete	Premium Gas	Active	From RFA: SWMU 63 - not sampled; since tank passed leak test and there is no evidence of release, NFA recommended.	Continuous vadose zone monitoring equipment for leaks along with a catch basin are scheduled to be installed at this site per 1993 Station UST Inventory.	LC		Unleaded			A,B,C,G	7
UST T-7	T-7	TF 6 (396)	1988	2,000 Fiberglass Coated Steel	Waste JP-5	Active	From RFA: SWMU 24-not sampled; tank normally empty because its used for spill containment; no evidence of release; NFA recommended. Instituted leak detection monitoring in-place. From EG&G report: Tank stores spilled fuel from TF-6.		LC		Waste JP-5			A,B,C	7

Table 3-7
Underground Storage Tank Inventory
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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
UST 148	148		Unknown	2,600 Concrete	Unknown	Removed	Removal of tank 148 was added to the AP contract. The tank was identified on as-builts as a 2,600 gal concrete tank. The material stored in the tank was not identified.		LC	1993	Unknown	X	Tank removal soil sampling results are not available.	E	7

Table 3-7
Underground Storage Tank Inventory
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LOC Reference	Tank No.	Nearest Building No.	Year Installed	Capacity (gallons)/ Tank Material	Substance Stored	Tank Status (2)	Comments	Further Action	Location Status	Closure/ Removal/ Abandon. Date	Latest Contents	RFA/ Other Sampling (X)	Soil Sample Results	Document Source	BCP Area Type
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Document Sources:

- A - MCAS El Toro Environmental Office. Management Overview of Storage Tanks. December 1993.
- B - EG&G Idaho, Inc. Draft USMC MCAS El Toro Underground Storage Tank Survey Report. Four Volumes. November 1990.
- C - JEG. MCAS El Toro RCRA Facility Assessment. Preliminary Review/Visual Site Inspection. July 16, 1993.
- D - Various JTL Underground Storage Tank Closure Reports
- E - American Processing Underground Storage Tank Removal - Soil Sampling Analytical Data.
- F - JEG. Preliminary Site Assessment/Underground Storage Tanks (UST) Removal Tank Closure Report. December 18, 1991.
- G - Personnel Interview conducted on February 7, 1993 with El Toro Tank Farm staff (Phil Bohn & Vern Zepp), Richard Duffin, and Chrisa Mitchell.
- H - Personal communications with El Toro staff in February 1994.
- I - JEG. MCAS El Toro Underground Storage Tanks Draft Monitoring Plan. February 12, 1993.

Location Status:

- LC = Location confirmed.
- NL = Not located. Unable to find a plan with either building or UST location.
- S = UST location identified on historical as-built plan. Location to be confirmed by field survey.
- SB = Location of building confirmed. UST location to be determine by field survey.

AP = American Processing (UST removal contractor)

BTEX = Benzene, Toluene, Ethylbenzene, Xylene

CE = Device under Conditional Exemption for Specified Wastestreams per letter from DTSC dated 1/10/94.

CRDL = Contract-required detection limit

CVZME = Continuous vapor zone monitoring equipment

FA = Further action

J = Estimated value

JEG = Jacobs Engineering Group

JTL = JTL Environmental Remediation Group UST removal contractor)

LCR = Law/Crandall Report (1993 oil/water separator survey contractor)

NA = Not applicable

NFA = No further action

OWS = Oil/Water Separator

R JP-5 = Recycled JP-5

TCE = Trichloroethylene

TF = Tank Farm

TPH = Modified EPA Method 8015.

TRPH = EPA Method 418.1.

VOCs = Volatile Organic Compounds

* - Pending Agency Approval

Tank Status

- (1) - Tank has been removed. Confirmation samples indicate contamination < regulatory action levels. Station needs to send letter to OCHCA stating closure of UST under Title 23 Article 7
- (2) - Status is based on MCAS El Toro UST Inventory List.
- (3) - Tank was removed under contract number N62474-90-D-5661 as described in a memorandum dated 01 April 1992 from Karen Kirkpatrick to Paul Sherwood/Facilities Management Director.
- (4) - Tank was removed under contract number N68711-91-C-0168 as described in a memorandum dated 2 March 1994 from David Crawley/Code 18 to Richard Barksdale/Code 18.
- (5) - Status verified by personnel at the Station's Installations Department

Table 3-8
Aboveground Storage Tank Inventory
MCAS El Toro BCP - March 1995

Database Tracking	Location	Size/Contents	Status	AST No.	Source	Parcel	BCP Area Type
AST 126	Bldg. 126	300 gal./10:10 Oil	Active	126	A	2A	7
AST 155	Bldg. 155	200 gal./Lube Oil	Active	155	A	5A	7
AST 245	Bldg. 245	1,000 gal./LPG	Active	245	B	1A	7
AST 317	Bldg. 317 C1	5,000 gal./Diesel	Active	317 C1 (1)	A	4B	7
AST 390A	Bldg. 390	500 gal./Unleaded	Active	390A	A	3A	7
AST 390B	Bldg. 390	500 gal./Diesel	Active	390B	A	3A	7
AST 626	Bldg. 626	1,000 gal./Waste Oil	Inactive	626	A	1B	7
AST 637	Bldg. 637	500 gal./Propane	Active	637	B	2A	7
AST 651	Bldg. 651	1,000 gal./Propane	Active	651	B	1G	7
AST 670	Bldg. 670	Unknown/LPG	Active	670	C	1G	7
AST 717	Bldg. 717	500 gal./Diesel	Active	717	A	5A	7
AST 753	Bldg. 753	200 gal./Pesticides	Active	753	A	4A	7
AST 797	Bldg. 797	1,000 gal./Waste Oil	Active	797	A	5A	7
AST 862	Bldg. 862	30,000 gal./JP-5	Active	862	A	4B	7

Notes:

LPG = liquid propane gas

(1) AST 317 C1 is owned and operated by the Station's municipal waste management contractor.

Sources:

A = Personal communications, R. Duffin/MCAS El Toro EO, February/March 1993.

B = SAIC, Draft Oil and Hazardous Substances Spill Prevention and Countermeasure Plan and Contingency Plan, January 1994.

C = MCAS El Toro Building Guide, 1993.

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Table 3-9
Less Than 90-Day Accumulation Area Inventory
MCAS EI Toro BCP - March 1995

Database Tracking	Building Number	Parcel	Status	Closure Evaluation (2)	SWMU/ AOC	RFA Sampling	Comments	BCP AREA TYPE
SAA 2	2	1A	Active	X			Identified in 1994 SPCC Plan	7
SAA 5A	5	5A	Inactive	X	25		Sampling Visit Not Recommended During PR/VS	2
SAA 5B	5	1A	Active	X	26	X	RFA recommended excavation of shallow stained soil.	6
SAA 7	7	5A	Inactive	X			Identified in 1994 SPCC Plan	7
SAA 10	10	1A	Active	X	27	X	RFA recommended NFA	2*
SAA 19	19	1A	Active				Identified in Station's HW Open Drum Inspection Report	7
SAA 22	22	1A	Active	X			Identified in 1994 SPCC Plan	7
SAA 29A	29	1D	Inactive	X	30	X	RFA recommended NFA	3*
SAA 29B	29	1D	Inactive	X	31		Sampling Visit Not Recommended During PR/VS	7
SAA 31A	31	1D	Active	X	272	X	RFA recommended NFA	3
SAA 31B	31	1D	Inactive	X			Identified in 1994 SPCC Plan	7
SAA 51	51	1D	Active	X	33	X	Excavate Shallow Stained Soil	6
SAA 77	77	1B	Active				Identified in Station's HW Open Drum Inspection Report	7
SAA 114	114	5A	Inactive	X	38		Sampling Visit Not Recommended During PR/VS	2
SAA 115	115	5A	Active	X	39	X	Shallow Soil Borings Recommended	7
SAA 130A	130	2A	Inactive	X	294		Sampling Visit Not Recommended During PR/VS	2
SAA 130B	130	2A	Active	X	295		Sampling Visit Not Recommended During PR/VS	2
SAA 130C	130	2A	Inactive	X	42		Sampling Visit Not Recommended During PR/VS	2
SAA 155A	155	5A	Inactive	X	240		No evidence of release	2
SAA 155B	155	5A	Inactive	X	241	X	RFA recommended NFA	3
SAA 155C	155	5A	Inactive	X	45	X	RFA recommended NFA	3
SAA 240	240	1A	Inactive	X	64		Sampling Visit Not Recommended During PR/VS	2
SAA 242	242	1A	Inactive	X	67		Sampling Visit Not Recommended During PR/VS	7
SAA 289	289	5A	Active	X	70	X	RFA recommended NFA	3
IRP 7	295	5A	Active		71		IRP Site 7 (1)	7
IRP 7	296	5A	Active		72		IRP Site 7 (1)	7
SAA 297	297	5A	Active	X	73	X	RFA recommended NFA	3
SAA 298	298	4A	Inactive	X	83	X	RFA recommended NFA	2
SAA 306	306	4A	Inactive	X	88	X	Shallow Soil Borings Recommended	7
SAA 307	307	4A	Active				Identified in Station's HW Open Drum Inspection Report	7
SAA 314	314	4A	Inactive	X	269	X	RFA recommended NFA	3
SAA 317	317	4B	Inactive	X	93		Sampling Visit Not Recommended During PR/VS	2
IRP 21	320	4B	Active		94		IRP Site 21 (1)	7
SAA 357	357	4A	Inactive	X	97		Sampling Visit Not Recommended During PR/VS	2
SAA 359A	359	4B	Inactive	X	254		Sampling Visit Not Recommended During PR/VS	2
SAA 359B	359	4B	Inactive	X	99	X	RFA recommended NFA	3
IRP 8	360	4B	Inactive		104		IRP Site 8 (1)	7
IRP 8	360	4B	Inactive		105		IRP Site 8 (1)	7
IRP 8	360	4B	Inactive		106		IRP Site 8 (1)	7

Table 3-9
Less Than 90-Day Accumulation Area Inventory
MCAS El Toro BCP - March 1995

Database Tracking	Building Number	Parcel	Status	Closure Evaluation (2)	SWMU/AOC	RFA Sampling	Comments	BCP AREA TYPE
SAA 370	370	4A	Active	X			Identified in 1994 SPCC Plan	7
SAA 371A	371	5A	Active	X	107	X	RFA recommended NFA	2
SAA 371B	371	5A	Inactive	X	242	X	RFA recommended NFA	3
SAA 386	386	4A	Active	X	114		Sampling Visit Not Recommended During PR/VS	2
SAA 388A	388	4A	Active	X	116	X	RFA recommended NFA	3
SAA 388B	388	4A	Inactive	X	251		Sampling Visit Not Recommended During PR/VS	2
SAA 389A	389	3A	Inactive	X	119		Sampling Visit Not Recommended During PR/VS	2
SAA 389B	389	3A	Inactive	X	259		Sampling Visit Not Recommended During PR/VS	2
SAA 390A	390	3A	Active	X	122		Sampling Visit Not Recommended During PR/VS	2
SAA 390B	390	3A	Inactive	X	261	X	RFA recommended NFA	3
SAA 392A	392	2A	Active	X	124	X	RFA recommended NFA	3
SAA 392B	392	2A	Inactive	X	271	X	RFA recommended NFA	3
SAA 398	398	5A	Inactive	X	252	X	RFA recommended NFA	3
SAA 441	441	3A	Inactive	X	256	X	RFA recommended NFA	3
SAA 442	442	3A	Inactive	X	126		Sampling Visit Not Recommended During PR/VS	2
SAA 445	445	4A	Inactive	X	127		Sampling Visit Not Recommended During PR/VS	2
SAA 447	447	3A	Inactive	X	130	X	RFA recommended NFA	3
SAA 456	456	3A	Inactive	X	135		Sampling Visit Not Recommended During PR/VS	2
SAA 461	461	5A	Active	X	138	X	RFA recommended NFA (1)	2
SAA 462	462	5A	Active	X	140		Sampling Visit Not Recommended During PR/VS	2
SAA 529	529	4A	Inactive	X	144	X	RFA recommended NFA	2
SAA 534	534	4B	Inactive	X	146		Sampling Visit Not Recommended During PR/VS	2
SAA 602	602	2A	Inactive	X	147	X	RFA recommended NFA	3
SAA 605	605	5A	Active	X	149	X	RFA recommended NFA	3
SAA 606	606	5A	Active	X	255	X	RFA recommended NFA	2
SAA 626	626	1B	Active		158		IRP Site 20 (1)	7
SAA 634	634	2A	Active	X			Identified in 1994 SPCC Plan	7
SAA 636	636	3A	Inactive	X	160	X	RFA recommended NFA	3
SAA 651	651	1G	Active	X	165	X	Located within SWMU/AOC 164	3
SAA 658	658	2A	Active	X	171	X	Shallow soil borings recommended	7
SAA 671	671	4A	Active	X	172	X	RFA recommended NFA	2
SAA 672	672	4A	Inactive	X	177		Sampling Visit Not Recommended During PR/VS	2
SAA 673	673	3A	Active	X	186	X	RFA recommended NFA	2
SAA 693	693	1G	Active				Identified in Station's HW Open Drum Inspection Report	7
SAA 698	698	5A	Active	X			Identified in 1994 SPCC Plan	7
SAA 744	744	1G	Active	X			Identified in 1994 SPCC Plan	7
SAA 746	746	2A	Active				Identified in Station's HW Open Drum Inspection Report	7
SAA 747	747	2A	Active				Identified in Station's HW Open Drum Inspection Report	7
SAA 761	761	3A	Inactive				Located at IRP Site 6 (2)	7

Table 3-9
Less Than 90-Day Accumulation Area Inventory
MCAS El Toro BCP - March 1995

Database Tracking	Building Number	Parcel	Status	Closure Evaluation (2)	SWMU/AOC	RFA Sampling	Comments	BCP AREA TYPE
SAA 765	765	3F	Inactive	X	266		Sampling Visit Not Recommended During PR/VS	2
SAA 769	769	4A	Inactive	X	222	X	RFA recommended NFA	2
SAA 770	770	4A	Inactive	X	223	X	RFA recommended NFA	3
SAA 771	771	1D	Inactive	X	224	X	RFA recommended NFA	2
SAA 772	772	3F	Inactive	X	225	X	RFA recommended NFA	3
SAA 778	778	5A	Inactive	X	226	X	RFA recommended NFA	3
SAA 779	779	5A	Inactive	X	227	X	RFA recommended NFA	3
SAA 800	800	4B	Active	X	229	X	RFA recommended NFA	2
SAA 831	831	3A	Active				Identified in Station's HW Open Drum Inspection Report	7
SAA 856	856	3A	Active	X	234	X	RFA recommended NFA	3
SAA 900	900	2A	Active				Environmental Office accumulation area	7

NOTES:

(1) - SWMUs/AOCs that were determined to be located within RI/FS site boundaries were eliminated from RFA sampling visits.

These SWMUs/AOCs will be investigated in the IRP.

(2) - Accumulation areas are currently being evaluated for removal and/or decontamination strategies.

* - Indicates RFA recommendation of "no further action" is pending U.S. EPA approval.

PR/VS - Preliminary Review/Visual Site Inspection performed as part of the RFA.

IRP - Installation Restoration Program

RFA - RCRA Facility Assessment

NFA - No Further Action

Sources:

Jacobs, 1993. MCAS El Toro Final RCRA Facility Assessment Report.

MCAS El Toro Hazardous Waste Open Drum Inspection Report Sheet

SAIC, 1994. Draft Oil and Hazardous Substances Spill Prevention and Countermeasure Plan and Contingency Plan (SPCC).

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Table 3-10
PCB Transformer Inventory
MCAS EI Toro BCP - March 1995

Database Tracking	Building Number	Original Transformer ID Number	Location	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	BCP Area Type
PCB T1	6	F503496-65P	W, PD	Pad	Active	Original transformer present; no evidence of release observed.	5A	1
PCB T2	12	5KL505	CS	Pad	Replaced	Transformer replaced; no evidence of release observed.	1A	1
PCB T3	19	1350660	S, PL	Pole	Unknown (2)	No evidence of release observed.	1A	1
PCB T4	35	NA	NW, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T5	58	23971	S, PL	Pole	Unknown (2)	No evidence of release observed.	1C	1
PCB T6	59	6954405	S, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	1C	1
PCB T7	59	6954539	S, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	1C	1
PCB T8	59	6956179	S, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	1C	1
PCB T9	60	7092522	S, PL	Pole	Unknown (2)	No evidence of release observed.	1C	1
PCB T10	65	645B17826	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1C	1
PCB T11	65	645B17827	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1C	1
PCB T12	65	645B17855	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1C	1
PCB T13	105	7093890	PL	Pole	Removed	A pad-mounted non-PCB (labeled) transformer (No. 16773-2) is located adjacent to pole, and possibly replaced pole transformer; no evidence of release observed.	2A	1
PCB T14	114	177072	C, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T15	115	177071	C, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T16	118	681549	N, PL	Pole	Unknown (2)	No evidence of release observed.	2A	1
PCB T17	120	7093966	W, PL	Pole	Unknown (2)	No evidence of release observed.	2A	1
PCB T18	120	7092506P	W, PL	Pole	Unknown (2)	No evidence of release observed.	2A	1
PCB T19	120	7093966P	W, PL	Pole	Unknown (2)	No evidence of release observed.	2A	1
PCB T20	125	53233	N, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	2A	1
PCB T21	125	6160963	N, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	2A	1
PCB T22	129	7092697	NW corner, PL	Pole	Unknown (2)	No evidence of release observed.	2A	1
PCB T23	129	7092974	NW, PL	Pole	Unknown (2)	No evidence of release observed.	2A	1
PCB T24	129	7093975	NW, PL	Pole	Unknown (2)	No evidence of release observed.	2A	1
PCB T25	165	14346-1	N	Pad	Replaced	Transformer replaced; no evidence of release observed.	3A	1
PCB T26	203	5638241	SE, PL	Pole	Unknown (2)	No evidence of release observed.	2A	1

Table 3-10
PCB Transformer Inventory
MCAS El Toro BCP - March 1995

Database Tracking	Building Number	Original Transformer ID Number	Location	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	BCP Area Type
PCB T27	203	6455115	SE, PL	Pole	Unknown (2)	No evidence of release observed.	2A	1
PCB T28	248	6887930	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed.	1D	1
PCB T29	248	66F2983	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed.	1D	1
PCB T30	248	66F3028	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed.	1D	1
PCB T31	248	66K117	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed.	1D	1
PCB T32	248	66K154	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed.	1D	1
PCB T33	248	NA	NA	NA	Removed	No transformers present at Building 248; no evidence of release observed.	1F	1
PCB T34	264	9750379	N, PD	Pad	Replaced	Transformer ID nos. 9750379 and 9750997 have been replaced with one transformer; no evidence of release observed.	1B	1
PCB T35	264	9750997	N, PD	Pad	Replaced	Transformer ID nos. 9750379 and 9750997 have been replaced with one transformer; no evidence of release observed.	1B	1
PCB T36	272	3700258	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1
PCB T37	272	6962781	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1
PCB T38	272	7093990	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1
PCB T39	281	7093256	N, PD	Pad	Removed	Building has been demolished; no evidence of transformer	1B	1
PCB T40	281	7093261	N, PD	Pad	Removed	Building has been demolished; no evidence of transformer	1B	1
PCB T41	281	7220136	N, PD	Pad	Removed	Building has been demolished; no evidence of transformer	1B	1

Table 3-10
PCB Transformer Inventory
MCAS EI Toro BCP - March 1995

Database Tracking	Building Number	Original Transformer ID Number	Location	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	BCP Area Type
PCB T42	285	6224013	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1
PCB T43	285	7093682	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1
PCB T44	285	7220241	S, PD	Pad	Replaced	Transformer has been replaced; new transformer appeared to be in good condition, with no indication of PCBs; no evidence of release observed.	1B	1
PCB T45	311	B58240	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T46	327	72535	E, PL	Pole	Removed	Transformer has been removed.	1C	1
PCB T47	327	6587555	E, PL	Pole	Unknown (2)	No evidence of release observed.	1C	1
PCB T48	327	65875666	E, PL	Pole	Unknown (2)	No evidence of release observed.	1C	1
PCB T49	335	1888163	S, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T50	359	B335346	W, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4B	1
PCB T51	360	B335627	S, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	4B	1
PCB T52	365	62194	B	Pad	Removed	Building demolished in 1988 and another building was constructed at the location; therefore, location could not be inspected.	1G	1
PCB T53	368	62220	C, RX	Pad	Removed	Transformer removed; no evidence of release observed.	4A	1
PCB T54	369	62221	N, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T55	370	62222	E, RX	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T56	371	10097-1	S, M	Pad	Active	A release of an oily liquid, possibly dielectric fluid, was present at the base of the transformer. Further evaluation of release is needed.	5A	7
PCB T57	371	10098-1	S, M	Pad	Active	No evidence of release observed.	5A	1
PCB T58	372	14538	W, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T59	374	14440	S, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	3A	1
PCB T60	378	06577-1	MH	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1

Table 3-10
PCB Transformer Inventory
MCAS El Toro BCP - March 1995

Database Tracking	Building Number	Original Transformer ID Number	Location	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	BCP Area Type
PCB T61	383	B684198	N, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T62	386	4418	E, PD	Pad	Replaced	Transformer replaced (three transformers present); no evidence of release observed.	4A	1
PCB T63	406	9908129	N, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	3A	1
PCB T64	410	NA	N, PL	Pole	Removed	A pad-mounted non-PCB (labeled) transformer (No. 14515) is located adjacent to pole, and possibly replaced pole transformer; no evidence of release observed.	1F	1
PCB T65	410	NA	N, PL	Pole	Removed	A pad-mounted non-PCB (labeled) transformer (No. 14545) is located adjacent to pole, and possibly replaced pole transformer; no evidence of release observed.	1F	1
PCB T66	415	C379541	S, M	Pad	Replaced	Transformer replaced; no evidence of release observed.	2B	1
PCB T67	439	C-861785	NC, B	Pad	Removed	Transformer removed; no evidence of release observed.	1G	1
PCB T68	445	C861997A	NW, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T69	447	C861997B	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	3A	1
PCB T70	449	7371282	B	Pad	Removed	Transformer removed; no evidence of release observed.	1G	1
PCB T71	450	7371279	C, B	Pad	Removed	Transformer removed; no evidence of release observed.	1G	1
PCB T72	451	7371281	E, B	Pad	Removed	Transformer removed; no evidence of release observed.	1G	1
PCB T73	452	7371280	E, B	Pad	Removed	Transformer removed; no evidence of release observed.	1G	1
PCB T74	457	C-862139	S, PD	Pad	Replaced	Transformer replaced; location sampled during RFA (SWMU 244); further investigation planned.	3A	7
PCB T75	458	Missing	SE, PD	Pad	Unknown	Transformer in operation; original transformer ID no. unknown; according to manufacturer, manufactured in 1961.	3F	1
PCB T76	460	9845884	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	3F	1
PCB T77	460	D317654	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	3F	1
PCB T78	464	J929874T71AA	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	3F	1
PCB T79	482	151103	S, PD	Pad	Removed	Building demolished; no evidence of transformer location.	5A	1

Table 3-10
PCB Transformer Inventory
MCAS EI Toro BCP - March 1995

Database Tracking	Building Number	Original Transformer ID Number	Location	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	BCP Area Type
PCB T80	582	B336887	S, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	2C	1
PCB T81	605	F-694715B	C, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T82	606	E-694715A	C, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T83	630	NA	NE, PL	Pole	Unknown (2)	No evidence of release observed.	1C	1
PCB T84	631	10096-1	E, RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T85	634	PAV 1646-01	EC, RI	Pad	Removed	Transformer enclosure present, but transformer removed; no evidence of release observed.	2A	1
PCB T86	634	YAP-70141	EC, RI	Pad	Removed	Transformer enclosure present, but transformer removed; no evidence of release observed.	2A	1
PCB T87	636	10832-1	RI	Pad	Replaced	Transformer replaced; no evidence of release observed.	3A	1
PCB T88	655	12945-1	S, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T89	658	C173562	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	2A	1
PCB T90	671	II344577P73AA	E, PD	Pad	Replaced	Transformer replaced; no evidence of release observed.	4A	1
PCB T91	692	786787895	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T92	692	786787910	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T93	692	786787919	N, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T94	716	Westinghouse	SE, PD	Pad	Replaced	No evidence of release observed.	5A	1
PCB T95	1765	959077	S	NA	Unknown	Unable to identify transformer location	NA	1
PCB T96	5014	5635257	PL	Pole	Unknown (2)	No evidence of release observed.	2A	1
PCB T97	5201	6963930P	PL	Pole	Unknown (2)	No evidence of release observed.	2B	1
PCB T98	5240	6969510	E, PL	Pole	Removed	Transformer removed; no evidence of release observed.	2C	1
PCB T99	5417	7794141	Backyard, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T100	5417	7794142	Backyard, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T101	5417	7794143	Backyard, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T102	5215/5216	69680882	PL	Pole	Unknown (2)	No evidence of release observed.	2C	1
PCB T103	687 (1)	793397	C, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T104	687 (1)	794144	C, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1

Table 3-10
PCB Transformer Inventory
MCAS EI Toro BCP - March 1995

Database Tracking	Building Number	Original Transformer ID Number	Location	Type	Status	1994 Field Survey Observations/ Other Comments	Parcel	BCP Area Type
PCB T105	687 (1)	6900519	C, PL	Pole	Removed	Transformer removed; no evidence of release observed.	1D	1
PCB T106	Gate 9	6833177	E, PL	Pad	Replaced	Transformer replaced; no evidence of release observed.	5A	1
PCB T107	NA	66F2984	NA	NA	Unknown	Unable to identify transformer location	NA	1
PCB T108	NA	NA	NE, PL	Pole	Removed	A pad-mounted non-PCB (labeled) transformer (No. 14518) is located adjacent to pole, and possibly replaced pole transformer; no evidence of release observed.	1F	1
PCB T109	Tank Farm #6	NA	W, PL	Pole	Unknown (2)	No evidence of release observed.	2A	1
PCB T110	271	--	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1
PCB T111	271	--	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1
PCB T112	271	--	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1
PCB T113	833	--	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1
PCB T114	833	--	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1
PCB T115	833	--	NW, PD	Pad	Active	Newly identified PCB transformer; no evidence of release observed.	1B	1

Notes:

NA = not available

Location abbreviations:

N = north side of building

S = south side of building

E = east side of building

W = west side of building

NW = northwest side of building

M = interior mezzanine

C = center of building

PD = outside pad

PL = outside pole-mounted

RI = inside room

RX = exterior room

B = basement

(1) Jacobs report indicates that transformer was located at Buildings 5103-5112 (housing).

(2) Pole-mounted transformers could not be accessed during field survey to verify transformer ID numbers.

Table 3-11 Non-Transformer PCB Equipment MCAS El Toro BCP - March 1995				
Building Number	Description	Concentration of PCBs (mg/l)	Comments	BCP Parcel
56	3 oil-filled cutouts	1.4	Not on list	1C
138	3 oil-filled cutouts	1.0		2A
176	Explosion-proof switch box	<1.0	Exterior	1A
178	Universal rectifier	3.8		1A
208	Universal rectifier	9.4	Contains 2 types of PCBs	2A
302	3 oil-filled cutouts	<0.1	Out-of-service AC motor	4A
311	3 oil-filled cutouts	<0.005	West set of 3	4A
	3 oil-filled cutouts	<0.005	East set of 3	
360	3 oil-filled cutouts	<1.0	Area 1 (west)	4B
	3 oil-filled cutouts	<0.005	Area 1 (east)	
	3 oil-filled cutouts	2.8	Area 2	
	3 oil-filled cutouts	1.0	Area 1 (middle)	
372	3 oil-filled cutouts	1.6	Transformer room	5A
382	Oil-filled switch	<1.0	Not on list	1C
384	3 oil-filled cutouts	8.2	On transformer	3A
414	3 oil-filled cutouts	<1.0		5A
435	3 oil-filled cutouts	<1.0		5A
	3 oil-filled cutouts	15.0		
439	3 oil-filled cutouts	4.2	In basement	1G
	3 oil-filled cutouts	<1.0	In basement	
547	Motor control center	6.9		2D
599	3 oil-filled cutouts	<0.005	Sampled drippings	4A
619	3 oil-filled cutouts	<1.0	Transformer room	3F
643	3 oil-filled cutouts	<1.0	North set of 3	5A
	3 oil-filled cutouts	5.0	South set of 3	
651	3 oil-filled cutouts	<1.0	On transformer	1G
664	3 oil-filled cutouts	<1.0	Exterior	3A
733	3 oil-filled cutouts	<1.0		1G
892	3 oil-filled cutouts	<0.005	Leaking	3A
Source: Kennedy/Jenks, 1991.				

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Table 3-12
Buildings with Known Asbestos
MCAS EI Toro BCP - March 1995

Database Tracking	Building Number	Description	Year Built	Parcel	Asbestos Determination	
					Not Identified	Confirmed Type
BLD 2	2	Hangar Bay/ Crew/Equip	1943	5A	X	
BLD 3	3	Material/IMRL	1943	5A	X	
BLD 4	4	Search & Rescue	1943	5A	X	
BLD 6	6	Security Hdqtrs.	1943	5A		NF
BLD 7	7	Storage Out of Stores	1943	5A	X	
BLD 8	8	Storage Out of Stores	1943	5A	X	
BLD 9	9	Storage Out of Stores	1943	5A	X	
BLD 11	11	Squadron Headquarters	1943	1A		NF
BLD 12	12	Group Headquarters	1943	1A		NF
BLD 15	15	Elec./Comm Maint Shop	1943	1A		NF
BLD 16	16	Storage Out of Stores	1943	1A	X	
BLD 19	19	Squadron Headquarters	1943	1A		NF
BLD 20	20	Maintenance/Storage	1943	1A	X	
BLD 21	21	General Storage Shed	1943	1A	X	
BLD 22	22	Elec./Comm Maint Shop	1943	1A	X	
BLD 23	23	Storage Out of Stores	1943	1A		NF
BLD 25	25	Construction Shop	1943	1D	X	
BLD 26	26	Communication Shop	1943	1A	X	
BLD 27	27	Provost Marshall Office Storage	1943	1D	X	
BLD 29	29	Navy Investigative Service Field Office	1943	1D		NF
BLD 31	31	Utilities Shop/TAFDS	1943	1D	X	
BLD 32	32	Bachelor Officers Quarters	1943	1D		NF
BLD 33	33	Bachelor Officers Quarters	1943	1D		NF
BLD 34	34	Bachelor Officers Quarters	1943	1D		NF
BLD 35	35	Bachelor Officers Quarters	1943	1D		NF
BLD 46	46	Reproduction	1943	1D	X	
BLD 51	51	Auto Organizational Shop	1943	1D		NF
BLD 52	52	Storage Out of Stores	1943	1D	X	
BLD 53	53	RASC/IRC Classroom	1943	1D	X	
BLD 56	56	Squadron Headquarters	1943	1C		NF
BLD 57	57	Bathhouse	1943	1C		F
BLD 58	58	Family Housing Services Office	1943	1C		F
BLD 59	59	Administration Office	1943	1C	X	
BLD 60	60	Reserve Support Unit	1943	1C		NF
BLD 66	66	Disbursing Office	1943	1B		F
BLD 75	75	Admin. Office/Fire Hdqtrs/Phone Ctr	1943	1B		NF
BLD 77	77	Exchange Warehouse/Maint Shop	1943	1B		F
BLD 83	83	Chapel Admin. Office	1943	1B		F
BLD 94	94	Gymnasium	1943	1B		F
BLD 96	96	Transportation Office	1943	4A	X	
BLD 105	105	Group Headquarters	1943	2A	X	
BLD 114	114	Maint Hangar Space	1966	5A		NF
BLD 115	115	Maint Hangar Space	1966	5A		NF
BLD 118	118	Maint Hangar Space	1943	2A	X	
BLD 119	119	Maint Hangar Space	1943	2A	X	
BLD 120	120	Maint Hangar Space	1943	2A	X	
BLD 122	122	Maint Hangar Space	1943	2A	X	
BLD 123	123	Maint Hangar Space	1943	2A	X	
BLD 125	125	Maint Hangar Space	1943	2A		NF
BLD 126	126	Maint Hangar Space	1943	2A	X	
BLD 127	127	Tire Storage	1943	2A	X	
BLD 132	132	Aviation Armament Shop	1943	2A	X	

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Buildings with Known Asbestos
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Database Tracking	Building Number	Description	Year Built	Parcel	Asbestos Determination	
					Not Identified	Confirmed Type
BLD 133	133	Storage	1943	2A		NF
BLD 134	134	MCP Storage/Hangar Maint Admin.	1943	2A		NF
BLD 135	135	Warehouse 222nd CCSQ.	1943	2A	X	
BLD 136	136	Nuclear/Biological/Chemical Storage	1943	2A	X	
BLD 138	138	Electronics Maint Division	1943	2A		F
BLD 139	139	3rd Marine Air Wing Embark	1943	2A	X	
BLD 142	142	Hazardous/Flammable Storage	1943	2A	X	
BLD 146	146	Standby Generator Building	1943	1C	X	
BLD 163	163	Magazine Ready Service(1)	1943	3A	X	
BLD 164	164	Small Arms Storage (1)	1943	3A	X	
BLD 165	165	Hazardous/Flammable Storage	1943	3A	X	
BLD 166	166	Small Arms Storage(1)	1943	3F	X	
BLD 167	167	Small Arms Storage(1)	1943	3F	X	
BLD 169	169	NBC Storage	1943	3F	X	
BLD 170	170	Ready Service Storage Magazine (1)	1943	3F	X	
BLD 171	171	Ready Service Storage Magazine (1)	1943	3F	X	
BLD 172	172	Ready Service Storage Magazine (1)	1943	3F	X	
BLD 240	240	Aero Club (1)	1944	1A	X	
BLD 241	241	Laundry Pick-up Point	1945	1A	X	
BLD 242	242	Museum	1944	1A	X	
BLD 243	243	Historical Center	1944	1A	X	
BLD 244	244	Historical Collection	1944	5A		NF
BLD 249	249	VIP Quarters	1945	1D		NF
BLD 250	250	VIP Quarters	1945	1D		NF
BLD 251	251	Conference Center/Recreation Pav.	1944	1D	X	
BLD 256	256	Aviation Phy Training/Medical Clinic	1945	1C	X	
BLD 257	257	Admin. Office	1944	1C	X	
BLD 263	263	Education Service Office	1945	1B		NF
BLD 271	271	Auditorium	1944	1B	X	
BLD 273	273	Post Office	1944	1C	X	
BLD 275	275	Training/Storage WG Band (1)	1944	1B		F
BLD 276	276	Bachelors Enlisted Quarters (1)	1945	1B		F
BLD 277	277	Bachelors Enlisted Quarters (1)	1945	1B		NF
BLD 279	279	Rehab Center	1945	1B	X	
BLD 285	285	Club System Warehouse	1944	1B		F
BLD 288	288	Maint Hangar Space	1944	5A		F
BLD 289	289	Maint Hangar Space	1944	5A		NF
BLD 290	290	General Storage	1944	2A	X	
BLD 291	291	Nuclear/Biological/Chemical	1944	2A		NF
BLD 295	295	Maint Hangar Space	1944	5A		F
BLD 296	296	Maint Hangar Space	1944	5A		F
BLD 297	297	Maint Hangar Space	1944	5A		F
BLD 299	299	Auto Vehicle Maint Shop	1944	4A		NF
BLD 302	302	Public Works Elec. Shop	1945	4A		NF
BLD 304	304	Academic Instruction/Credit Union	1945	4A		NF
BLD 305	305	Group Headquarters	1944	4B	X	
BLD 306	306	Public Works Pipe/Heat/Refrig Shop	1944	4A		NF
BLD 307	307	EAF Storage/Station Operations Maint. Squadron Recovery Hdqtrs	1944	4A		NF
BLD 308	308	Ground Support Equipment Storage	1944	2A		NF
BLD 309	309	Group Headquarters	1944	4A		NF
BLD 310	310	Hangar (1)	1944	5A	X	
BLD 312	312	Photo Lab (1)	1944	4A		F

Table 3-12
Buildings with Known Asbestos
MCAS EI Toro BCP - March 1995

Database Tracking	Building Number	Description	Year Built	Parcel	Asbestos Determination	
					Not Identified	Confirmed Type
BLD 313	313	Field Maintenance Shop	1944	4B		NF
BLD 315	315	A/C Ground Support Equipment Shop	1945	5A		NF
BLD 317	317	Commissary Warehouse	1945	4B		NF
BLD 318	318	General Warehouse Navy	1945	4B		NF
BLD 319	319	General Warehouse Navy	1945	4B	X	
BLD 321	321	Admin. Office/General Warehouse Navy	1945	4B		F
BLD 322	322	Mess Halls Enlisted (1)	1945	4B		F
BLD 324	324	Applied Instruction/Storage/CO2 Storage	1945	4A		F
BLD 325	325	Hazardous/Flammable Storehouse	1945	4A		NF
BLD 326	326	Hazardous/Flammable Storehouse	1945	4A		F
BLD 328	328	Temporary Admin. Spaces	1945	1C		F
BLD 329	329	Defence Commissary Agency Headquarters	1945	1C		F
BLD 333	333	Field Maint. Shop	1945	4A	X	
BLD 341	341	Ground Support Equipment Shop	1945	2A	X	
BLD 355	355	Snack Bar #12	1943	4B	X	
BLD 357	357	Hazardous/Flammable Storehouse	1951	4A	X	
BLD 358	358	Water Distribution Building	1951	5A	X	
BLD 360	360	General Warehouse Navy	1952	4B		F
BLD 363	363	Miscellaneous POL Pipeline Shelter	1952	2A	X	
BLD 364	364	Mess Hall #2	1952	1G		NF
BLD 366	366	Billeting Office	1954	1G		F
BLD 367	367	Bachelor Enlisted Quarters/Academic Instr.	1954	1G		NF
BLD 368	368	Admin. Office	1954	4A		NF
BLD 369	369	Servmart	1954	4A		F
BLD 370	370	Public Works Paint/Carpentry/Metal Trades	1954	4A		F
BLD 371	371	Maint Hangar Space	1954	5A		NF
BLD 372	372	Airfield Operations Bldg.	1954	5A		NF
BLD 374	374	Heating Plant Bldg./Conversion Station	1954	3A		NF
BLD 375	375	Bachelor Officers Quarters	1954	1D		F
BLD 376	376	Fire Station Dispatch/Ground Safety	1954	1C		NF
BLD 382	382	Electrical Distr. Subs #1	1951	1C		NF
BLD 383	383	Electrical Distr. Subs #2	1954	4A		NF
BLD 384	384	Electrical Distr. Subs #3	1954	3A		NF
BLD 385	385	Electrical Distr. Subs #4	1954	2A	X	
BLD 386	386	Construction Equipment Shop	1955	4A	X	
BLD 388	388	Field Maintenance Shop	1955	4A		NF
BLD 392	392	Aircraft Ground Support Equip. Shop	1955	2A		F
BLD 394	394	Transmitter	1956	5C		NF
BLD 404	404	Receiver Building	1957	5A		NF
BLD 405	405	Applied Instruction Building	1956	3A		F
BLD 406	406	Applied Instruction Building	1956	3A		F
BLD 407	407	Squadron Headquarters	1956	3A		NF
BLD 415	415	Storage Out of Stores	1957	2B		NF
BLD 416	416	Storage Building	1957	3F		NF
BLD 439	439	Branch Medical/Dental Clinic	1959	1G		NF
BLD 440	440	Missile Magazine	1959	3A	X	
BLD 441	441	Aviation Armament/Station Ordnance	1959	3A		F
BLD 442	442	Aviation Armament/Station Ordnance	1959	3A		F
BLD 443	443	Acad. Instr. Bdg./LVT Ctr./Photo Lab	1959	1G		F
BLD 445	445	Hazardous/Flammable Storehouse	1959	4A		NF
BLD 449	449	Bachelor Enlisted Quarters	1959	1G		F
BLD 450	450	Bachelor Enlisted Quarters	1959	1G		F

Table 3-12
Buildings with Known Asbestos
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Database Tracking	Building Number	Description	Year Built	Parcel	Asbestos Determination	
					Not Identified	Confirmed Type
BLD 451	451	Bachelor Enlisted Quarters	1959	1G		F
BLD 452	452	Bachelor Enlisted Quarters	1959	1G		F
BLD 453	453	Maintenance Hangar Space	1960	3A		NF
BLD 454	454	Maintenance Hangar Space	1960	3A		NF
BLD 456	456	Gen. Warehouse/Aviation Supply	1960	3A		F
BLD 457	457	Grp Hdqtrs/Barb Shop/Dental Clinic/Mess Hall	1960	3A		F
BLD 458	458	Hazardous Flammable Storehouse	1960	5A	X	
BLD 463	463	Maint. Hangar Space/Engine Maint. Shop	1960	5A		NF
BLD 464	464	Golf Course Clubhouse	1959	3F		F
BLD 469	469	Equipment Storage Building	1959	3A	X	
BLD 475	475	Storage Building/Disbursing	1946	1B	X	
BLD 523	523	Storage	1945	1B	X	
BLD 529	529	Public Works Expend VIP Storage	1944	4A		NF
BLD 543	543	High Explosive Magazine	1952	2F	X	
BLD 544	544	High Explosive Magazine	1952	2F	X	
BLD 545	545	High Explosive Magazine	1952	2F	X	
BLD 546	546	High Explosive Magazine	1952	2F	X	
BLD 555	555	POL Sampling/Test Building	1955	2D		F
BLD 556	556	Misc. POL Pipeline Facility	1955	2D		NF
BLD 568	568	Standby Generator Building	1956	5C	X	
BLD 578	578	Water Distribution Building	1957	1F		NF
BLD 600	600	Storage Out of Stores	1961	1A		NF
BLD 605	605	Maintenance Hanger Space	1965	5A		F
BLD 606	606	Maintenance Hanger Space	1965	5A		F
BLD 611	611	Missile Magazine	1966	3A	X	
BLD 615	615	Handball Courts	1966	1F	X	
BLD 616	616	Admin. Office	1966	4A		NF
BLD 619	619	Standby Generator Building	1966	3F		F
BLD 624	624	Air Terminal/SQ Headquarters	1967	5A		NF
BLD 625	625	Hobby Shop/Automotive	1967	1B	X	
BLD 626	626	Hobby Shop/Automotive	1967	1B	X	
BLD 629	629	Academic Instruction Building	1968	1C		NF
BLD 631	631	Applied Instruction Building	1968	4A	X	
BLD 634	634	Hangar/Eng. Maint./Avionics Shop	1969	2A		NF
BLD 636	636	Parach./Surv. Equip./Cryogenics Office	1969	3A		F
BLD 639	639	Electric Power Plant Building	1969	5A	X	
BLD 640	640	Electric Power Plant Building	1969	5A	X	
BLD 641	641	Electric Power Plant Building	1969	5A	X	
BLD 642	642	Electric Power Plant Building	1969	5A	X	
BLD 649	649	Exchange Warehouse/Retail/Cafeteria	1970	1G		F
BLD 650	650	Exchange Retail Shop	1970	1G		NF
BLD 651	651	Exchange Auto Rep./Supplemental Gas Station	1971	1G		NF
BLD 655	655	Field Maintenance Shop	1970	4A		NF
BLD 658	658	Engine Test Cell	1972	2A		NF
BLD 660	660	Bachelor Enlisted Quarters	1973	1G		F
BLD 661	661	Transient Enlisted Quarters	1973	1G		F
BLD 664	664	Substation Building	1971	3A	X	
BLD 666	666	Bachelor Enlisted Quarters	1973	1G		F
BLD 667	667	Bachelor Enlisted Quarters	1973	1G		F
BLD 668	668	Bachelor Enlisted Quarters	1973	1G		F
BLD 669	669	Bachelor Enlisted Quarters	1973	1G		F
BLD 671	671	Refueler Admin.	1973	4A		NF

Table 3-12
Buildings with Known Asbestos
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Database Tracking	Building Number	Description	Year Built	Parcel	Asbestos Determination	
					Not Identified	Confirmed Type
BLD 672	672	Refueling Vehicle Maint. Shop	1973	4A	X	
BLD 673	673	ACFT/Ground Support Equipment Shed	1974	3A		NF
BLD 676	676	Community Storage Misc.	1973	2C	X	
BLD 677	677	Meteorological Building	1958	5A	X	
BLD 678	678	Housing/Maint. Storage	1973	2C	X	
BLD 683	683	Cold Storage/General Warehouse	1974	1A		NF
BLD 684	684	Applied Instruction Building	1974	1C	X	
BLD 685	685	Elec. Distribution Building	1974	1A	X	
BLD 688	688	Receiver Building	1973	2F		NF
BLD 689	689	Receiver/Activity TV Antenna	1973	2F		
BLD 693	693	Operational Flight Trainer (KC-130)	1975	1G	X	
BLD 694	694	Commissary	1975	1G		NF
BLD 695	695	Line Maintenance Shelter	1975	5A		NF
BLD 696	696	Line Maintenance Shelter	1975	5A		NF
BLD 697	697	Line Maintenance Shelter	1975	5A		NF
BLD 698	698	Line Maintenance Shelter	1975	5A		NF
BLD 713	713	Hazardous/Flammable Storehouse	1977	2B	X	
BLD 714	714	Line Maintenance Shelter	1977	5A		NF
BLD 715	715	Line Maintenance Shelter	1977	5A		NF
BLD 716	716	Hush House	1978	5A		NF
BLD 717	717	Crash, Fire, Rescue Storage	1978	5A		NF
BLD 718	718	Modular Club/Lampost Pizza	1978	1B		NF
BLD 722	722	Convenience Food Store	1979	2C		NF
BLD 726	726	Line Maintenance Shelter	1981	5A		NF
BLD 727	727	Line Maintenance Shelter	1981	5A		NF
BLD 728	728	Line Maintenance Shelter	1983	5A		NF
BLD 730	730	Communications Center	1980	1A		NF
BLD 731	731	Enlisted Personnel Quarters	1980	1G		NF
BLD 732	732	BEQ P-054	1980	1G		NF
BLD 733	733	Boiler Room P-054	1980	1G		NF
BLD 734	734	Restroom P-313	1980	2A		NF
	735	Generator Bldg 9-313 (2)	1980	NL		NF
BLD 740	740	BEQ P-326 'B'	1982	1G		NF
BLD 741	741	BEQ P-326 'C'	1982	1G		NF
BLD 743	743	Financial Building	1971	1G		NF
BLD 745	745	Warehouse (Mag-II) P-296	1983	2A		NF
BLD 746	746	Flight Simulator P-270	1984	2A		NF
	747	Maintenance	1983	2A	X	
BLD 748	748	Restroom	1983	2A		F
BLD 749	749	Restroom P-437	1983	2A		NF
	750	Sentry Booth	1983	2A	X	
	751	Storage	1983	2A	X	
BLD 752	752	Fuel Farm #5 Office	1983	2A		NF
BLD 757	757	Mars	1983	1F		NF
	782	Storage	1983	3F	X	
BLD 783	783	Exchange Admin./Service Outlets	1983	1G		NF
BLD 787	787	NBC Defense Platoon Facility	1984	3A		NF
BLD 1524	1524	General Storage Shed	1945	1C		NF
BLD 1538	1538	Fuel Farm #4 Office	1945	2A	X	
BLD 1580	1580	General Warehouse Navy	1945	4B	X	
BLD 1595	1595	Public Works Maint. Storage	1945	4A		NF
BLD 1601	1601	Public Works Maint. Storage	1945	4A		NF